FIVE ESTUARIES
OFFSHORE WIND FARM

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ENVIRONMENTAL STATEMENT

VOLUME 6, PART 6, ANNEX 4.7: BAT SURVEY REPORT: NORTH OF A120

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FIVE ESTUARIES OFFSHORE WIND FARM

Bat Survey Report

Prepared for: **GoBe Consultants (on behalf of Five Estuaries Offshore Wind Ltd)**

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1.0 Introduction

Five Estuaries Offshore Wind Farm (VE OWF) is a Nationally Significant Infrastructure Project (NSIP). An Environmental Impact Assessment (EIA) is being undertaken, the findings of which will be presented within an Environmental Statement (ES), which will accompany a Development Consent Order (DCO) application under the Planning Act 2008.

SLR Consulting was commissioned by GoBe Consultants, on behalf of Five Estuaries Offshore Wind Ltd, to undertake a suite of bat surveys of those relevant parts of the project site that may be affected by the construction and operation of the onshore aspects of the VE OWF project north of the A120. These comprise the installation of a cable within a working corridor and the construction of a substation (hereafter referred to as "onshore infrastructure").

This report presents the findings of the bat surveys undertaken in 2022 and 2023, in line with the recommendations in the Preliminary Ecological Appraisal (PEA)[1].

1.1 Survey Area

In accordance with the EIA Scoping Report and PEA report bat activity survey was undertaken at hedgerows, woodlands and/or riparian areas which may be removed, illuminated or breached. Preliminary roost inspections and presence/absence surveys were conducted at trees which may be removed or disturbed.

Within this report the following terms are used:

- Study Area: This is the 2km zone around the draft Red Line Boundary (RLB) available at the time of survey as presented on Drawing 1;
- Survey Area: Within the draft RLB available at the time of survey, plus the surrounding 100 m (i.e. 100m either side of the onshore ECC and to all sides of any other infrastructure or works areas such as Temporary Construction Compounds (TCCs) and access tracks);
- Exclusion Areas: prior to the commencement of surveys, the VE design team were able to identify certain areas that would not be subject to direct impact as a result of the scheme (as shown on Drawing 1 and 2). These areas were therefore excluded from detailed survey, but where possible, were subject to preliminary roost assessment (PRA); and
- Areas other than these are specifically described.

1.2 Purpose of this Report

This report presents the findings of the 2022 and 2023 bat surveys north of the A120. The report seeks to establish baseline conditions and identify habitats that may be important for bat species. The assessment of impacts resulting from VE is beyond the scope of this report however and will be covered in the Onshore Biodiversity and Nature Conservation chapter of the ES.

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[1] Five Estuaries Offshore Wind Farm: Preliminary Ecological Appraisal (Onshore), SLR Consulting, May 2022

The main objectives of the study were to gather baseline information in respect of bats using the Survey Area and in particular the following:

- Assess the suitability of trees and habitats for roosting, foraging and commuting bats;
- Determine the presence/likely absence of bat roosts and characterise any roosts that are present; and
- Assess the use of the survey area by bats for foraging and commuting, and if possible, to determine relative activity levels across the site so as to inform avoidance and /or mitigation measures.

1.3 Evidence of Technical Competence and Experience

1.3.1 Survey Team

The table below provides details of the staff who undertook bat survey related work.

Table 1-1
Survey Staff

Name & Position	Professional Memberships and Bat licence details	Years Experience of bat survey	Task(s) conducted
Jess Colebrook, Principal Ecologist	Chartered Environmentalist (CEnv) Full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) NE bat licence - 2015-11002-CLS-CLS	22 years	Survey design and scoping. Bat sound data quality assurance checks.
Emma Clarke, Senior Field Ecologist	Qualifying member of CIEEM NE bat licence - 2023-10986-CL18-BAT (February 2023) Accredited Agent on NE bat licence - 2015-11002-CLS-CLS - Jess Colebrook (Licensee) at time of survey	4 years	Preliminary Roost Assessment (PRA) Presence/Absence Survey – PRF Inspection Bat sound data analysis
Emily Drinkwater Associate Ecologist	Associate member of CIEEM NE bat licence - 2016-23168-CLS-CLS	11 years	Preliminary Roost Assessment (PRA) Presence/Absence Survey – PRF Inspection
Ellen Miller, Senior Ecologist	Associate member of CIEEM NE bat licence 2022-10886-CL17-BAT	4 years	Preliminary Roost Assessment (PRA)
Amy Gill, Senior Field Ecologist	Qualifying member of CIEEM Accredited Agent on NRW bat licence S088415/1 - Jess Colebrook (Licensee)	3 years	Presence/Absence Survey- dusk emergence/dawn re-

Name & Position	Professional Memberships and Bat licence details	Years Experience of bat survey	Task(s) conducted
			entry Bat sound data quality assurance checks.
Katherine Jones, Project Ecologist	Qualifying member of CIEEM	2 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Gemma Hill, Project Ecologist	Qualifying member of CIEEM	1 year	Presence/Absence Survey- dusk emergence/dawn re-entry Bat sound analysis
Anna Volak, Senior Field Ecologist	Qualifying member of CIEEM	2 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Kevin McGee, Senior Field Ecologist	Associate member of CIEEM NE bat licence – 2018-34260-CLS-CLS	8 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Shannon Davis, Senior Ecologist	Qualifying member of CIEEM	5 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Giselle Hynes, Senior Field Ecologist	Qualifying member of CIEEM	4 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Guy Ostler, Project Ecologist	Qualifying member of CIEEM	2 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Sally Wilding, Senior Ecologist	Associate member of CIEEM	5 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Ethan Westmerland, Assistant	Application for Qualifying member of CIEEM in progress.	2 years	Presence/Absence Survey- dusk emergence/dawn re-

Name & Position	Professional Memberships and Bat licence details	Years Experience of bat survey	Task(s) conducted
Ecologist			entry
Marsha Perera, Graduate Ecologist	Qualifying member of CIEEM	1 year	Presence/Absence Survey- dusk emergence/dawn re-entry
Harry Sunter, Assistant Ecologist	Application for Qualifying member of CIEEM in progress.	1 year	Presence/Absence Survey- dusk emergence/dawn re-entry
Hannah McBlain, Project Ecologist	Qualifying member of CIEEM	2 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Charlie Kempton, Project Ecologist	Qualifying member of CIEEM	2 years	Presence/Absence Survey- dusk emergence/dawn re-entry
Darcey Haldar Graduate Ecologist	Qualifying member of CIEEM	2 years	Activity Survey (Automated)
Peter Hewitt, Assistant Ecologist (Thomson)	BSc (Hons), Qualifying member of CIEEM	2 years	Activity Survey (Transect)
Jessica Sweeney, Assistant Ecologist (Thomson)	BSc (Hons) MSc, Qualifying member of CIEEM	2 years	Activity Survey (Transect)
David Mahers, Assistant Ecologist (Thomson)	BSc (Hons), Qualifying member of CIEEM	3 years	Activity Survey (Transect)
William Dearden, Assistant Ecologist (Thomson)	BSc (Hons), MSc	3 years	Activity Survey (Transect)

Name & Position	Professional Memberships and Bat licence details	Years Experience of bat survey	Task(s) conducted
Charlotte Epps, Assistant Ecologist (Thomson)	BSc (Hons)	2 years	Activity Survey (Transect)

1.3.2 Reporting

This report has been authored by Emma Clarke and Jess Colebrook. Jess is leading the onshore ecological work necessary to inform the EIA for the project, has been involved in the scoping and consultation process.

This report has been subject to review as part of SLR's Quality Assurance policies by Dr Andrea Wilcockson. Andrea is a Technical Director within SLRs Ecology and Biodiversity team. She is a Chartered Environmentalist and a full member of CIEEM. Andrea has over nineteen years' experience as a consultant ecologist. Andrea is a Natural England licenced bat, dormouse and great crested newt surveyor.

2.0 Methodology

The methods used during each survey are in accordance with the Bat Conservation Trust (2016) Bat Survey for Professional Ecologists Good Practice Guidelines (3rd Edition)[2] unless stated otherwise.

2.1 Baseline Data Collection

2.1.1 Field Surveys: Roost Assessment

Numerous buildings and structures are present within the survey area that may be used by roosting bats; none are anticipated to be affected by the project (directly or indirectly) and therefore none have been specifically mapped or surveyed.

Refer to Drawing 1 for tree locations, woodland locations, transect routes and static detector locations. Full details in respect of survey dates, conditions, surveyors, equipment used, and limitations are included in the detailed tabulated results data at Appendices A - D.

A summary of the suite of surveys undertaken is provided below.

Preliminary Roost Assessment (PRA)

Woodland

Preliminary assessment of woodland blocks was undertaken to identify whether any trees with PRFs were present. The aim was not to identify and map each individual tree, but to ascertain whether suitable roost features were present which may require further assessment in the event they are likely to be affected by the scheme. This involved a licensed batworker undertaking a walkover of the woodland and recording the following parameters:

- Tree species present;
- Approximate density (based on representative 10m x 10m quadrat);
- Percentage with PRF (based on representative 10m x 10m quadrat);
- Types of PRF present;
- Potential for the woodland to support roosting bats (based on the same criteria as applied to trees and explained in the following section); and
- Additional notes.

[2] Collin, J (ed)(2016) *Bat Surveys for Professional Ecologists: Good Practice Guidelines* (3rd edn). The Bat Conservation Trust, London.

Trees

All accessible trees within the survey area were subject to a preliminary roost assessment (PRA) by a licensed batworker. The inspection involved using binoculars and torches to seek Potential Roost Features (PRF), such as lifted bark, dense ivy, woodpecker hole and/or other cavities. Trees were then assessed as having negligible, low, moderate or high potential to support bats as follows (in accordance with BCT (2016)):

- Negligible: Negligible habitat features likely to be used by roosting bats;
- Low: A tree of sufficient size and age to contain PRFs but with none seen or features seen with only very limited roosting potential;
- Moderate: A tree with one or more PRFs that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely to support a roost of high conservation status; and
- High: A tree with one or more PRFs that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.

The location of trees with negligible or low potential to support bats was noted and is shown on Drawings 1 and 2; no further notes were gathered for these categories of trees. For moderate or high potential trees, descriptive details for the tree and potential roost features (PRF) were gathered.

In accordance with published good practice, trees with moderate potential were subject to a minimum of two presence/absence survey visits to determine likely bat absence, trees with high potential were subject to three. See below for presence/absence survey details.

Presence/Absence Survey

The requirement within the BCT 2016 guidelines to space presence/absence surveys two weeks apart was not implemented at all trees in 2022. For the trees where this was the case, additional presence/absence survey was undertaken in June 2023. This is not considered to be a limitation; recent study has shown that the encounter rate for a single visit to a roost feature during the maternity period can be as low 5% for species which switch roosts often. Adding a second non-sequential visit (i.e., a second visit not on the following day) does not increase these odds. The only way of increasing the odds is to visit the tree sequentially: two sequential visits increase the odds to 9.8%.)[1]. It is therefore considered that the 2016 BCT Guidelines, which does not present evidence for its stance in respect of spacing of surveys for detecting tree roosting bats, should not therefore be considered to be wholly reliable or prescriptive.

Bearing this in mind, professional judgement has additionally been used to design a suite of bat surveys (presence/absence, transect and static detector) that in combination seek to determine the presence of significant roosts, acknowledging the fact that small or infrequently used roosts are unlikely to be picked up by survey. Presence/absence surveys have been conducted with the aim being to maximise the chances of

[1] BTHK 2018. *Bat roosts in Trees – A Guide to Identification and Assessment for Tree-Care and Ecology Professionals.* Exeter. Pelagic Publishing.

locating significant roosts (i.e., maternity colonies), when the seasonal peak in bat numbers is occurring as this is the time bats/evidence of bats is most detectable. The probability of detecting field signs over this period is increased due to increased duration of roost occupancy as the summer progresses, a greater build-up of droppings/less weathering action of accumulations of droppings, and more occasions of roost entry/exits per night by females to nurture young.

Potential Roost Feature Inspection

Trees which could potentially be lost or damaged or disturbed by the project and assessed with moderate or high potential to support bats during the PRA were subject to an at-height PRF inspection (where safe to do so) during the active season (May – September) to better determine the roost potential and gather evidence of roosting bats (if present).

The detailed survey of PRFs involved a search for signs such as droppings, feeding remains, urine staining and bark smoothing, as well as for bats themselves. All safely accessible PRFs were closely inspected using high powered torches (1M candle power), endoscopes, close focus binoculars and bat detectors as appropriate. Evidence of bat use and details of individual PRFs was recorded by surveyors and used to refine the assessment of the likelihood that an individual feature would be used by bats. Any bat droppings were retained and sent for DNA analysis to determine bat species.

If full survey was possible during the PRF inspection, and given that all such inspections were undertaken in the summer period, the survey was deemed to count as a presence/absence survey. If full survey access was not possible (due to complicated features or lack of safe access) then the PRF inspection was not counted as a complete presence/absence survey and additional dusk emergence/dawn re-entry survey carried out accordingly.

Dusk emergence and dawn re-entry survey

All trees which could potentially be lost or damaged or disturbed by the project and assessed with moderate or high potential to support bats during the PRA were also subject to dawn emergence and/or dawn re-entry survey to better determine bat presence/absence.

Surveyors were positioned so to allow full view of trees with PRF, as indicated on Drawing 2. Surveyors closely watched from 15 minutes before dusk until 90 minutes afterward, or in the case of dawn surveys 90 minutes prior to sunrise until daylight. All bat activity was recorded using full spectrum detector equipment (Batlogger M2) and Canon XA10 Infra Red (IR) cameras. Sound data was analysed to confirm species identification at recorded roosts only; however, the remainder has been held on file for reference.

2.1.2 Field Surveys: Activity Survey

The Survey Area is considered to be of varying quality for use by foraging and commuting bats, and has therefore subdivided into the following areas for the purpose of activity surveys (listed from south to north), based upon definitions provided Table 4.1 of survey guidelines[2]. The survey effort at each area meets the recognised standard, but goes beyond these standards in terms of automated detector installation.

- Transect 9. East of Bentley Road, west of Holland Brook. High potential. One transect defined. One survey visit per month (May – October) undertaken at dusk or dawn. Five automated bat detectors installed (numbers 18-22), data collected on five consecutive nights per month (May – October);
- Transect 10. West of Bentley Road, south of Ardleigh Road. Moderate potential. One transect defined.

One survey visit per month (May – October) undertaken at dusk or dawn. Five automated bat detectors installed (numbers 23-27), data collected on five consecutive nights per month (May – October); and

- Transect 11. North of Ardleigh Road. One transect defined. High potential. One survey visit per month (May – October) undertaken at dusk or dawn. Six automated bat detectors installed (numbers 28-33), data collected on five consecutive nights per month (May – October).

Transects

A team of two surveyors walked each transect route (shown on Drawing 1), starting at sunset and taking 2-3 hours to complete. The survey team were each equipped with a full spectrum bat detector (Batlogger M2) which recorded bat calls, times and location. In addition, where possible surveyors made notes of bats observed during the survey including behaviours seen and direction of flight. Data from the detectors was later subject to analysis to determine species using sound analysis software (Kaleidoscope Pro), refer also to Section 2.2.

The survey details are provided in the table below.

Table 2-1
Transect Survey Dates, Times and Weather

Date	Transect No.	Sunset/ Sunrise Time	Survey Period	Weather at start	Weather at end
24/05/2022 (Dusk)	9	20:56	20:56 – 23:56	12˚C, patchy cloud, dry, 14mph wind.	12 ˚C, patchy cloud, dry, 10mph wind.
28/06/2022 (Dawn)	9	04:39	01:39 – 04:35	14 ˚C, hazy, dry, 7mph wind.	11 ˚C, no cloud, dry, 6mph wind.
26/07/2022 (Dusk)	9	20:55	20:54 – 23:54	16 ˚C, patchy cloud, dry, 9mph wind.	15 ˚C, patchy clous, dry, 8mph wind.
01/09/2022 (Dawn)	9	06:08	03:07 – 06:07	17 ˚C, hazy, dry, 15mph wind.	17 ˚C, patchy cloud, dry, 15mph wind.
27/09/2022 (Dusk)	9	18:43	18:43 – 21:45	12 ˚C, hazy, dry, 14 mph wind.	10 ˚C, overcast, dry, 9mph wind.
25/10/2022 (Dawn)	9	07:38	04:38 – 07:38	11 ˚C, no cloud, dry, 7mph wind.	11 ˚C, no cloud, dry, 7mph wind.
25/05/2022 (Dawn)	10	04:49	01:49 – 04:51	11 ˚C, patchy cloud, dry, 8mph wind.	11 ˚C, patchy cloud, dry, 9mph wind.
28/06/2022	10	21:19	21:18 – 23:43	17 ˚C, patchy cloud, dry,	15 ˚C, patchy cloud, dry,

Date	Transect No.	Sunset/ Sunrise Time	Survey Period	Weather at start	Weather at end
(Dusk)				12mph wind.	2mph wind.
27/07/2022 (Dawn)	10	05:11	02:10 – 05:10	13 ˚C, patchy cloud, dry, 7mph wind.	13 ˚C, patchy cloud, dry, 8mph wind.
01/09/2022 (Dusk)	10	19:43	19:42 – 22:42	20 ˚C, overcast, dry, 15mph wind.	18 ˚C, overcast, dry, 9mph wind.
28/09/2022 (Dawn)	10	06:52	03:51 – 06:22	7 ˚C, no cloud, dry, 9mph wind.	6 ˚C, no cloud, dry, 7mph wind.
25/10/2022 (Dusk)	10	17:41	17:45 – 20:00	15 ˚C, no cloud, dry, 9mph wind.	14 ˚C, no cloud, dry, 7mph wind.
24/05/2022 (Dawn)	11	04:51	01:51 – 04:51	11 ˚C, overcast, dry, 9mph wind.	11 ˚C, overcast, mist, 12 mph wind.
29/06/2022 (Dusk)	11	21:19	21:18 – 23:45	17 ˚C, overcast, dry, 10mph wind.	16 ˚C, overcast, light showers, 9mph wind.
26/07/2022 (Dawn)	11	05:09	02:09 – 05:09	15 ˚C, no cloud, dry, 8mph wind.	15 ˚C, no cloud, dry, 9mph wind.
31/08/2022 Dusk)	11	06:06	19:45 – 22:45	18 ˚C, no cloud, dry, 18pmh wind.	17 ˚C, no cloud, dry, 17mph wind.
29/09/2022 (Dawn)	11	06:53	03:53 – 06:53	7 ˚C, no cloud, dry, 6mph wind.	6 ˚C, overcast, dry, 3mph wind.
26/10/2022 (Dawn)	11	07:40	05:00 – 07:40	15 ˚C, no cloud, dry, 14mph wind.	15 ˚C, no cloud, dry, 11mph wind.

Automated static detector survey

15 automated Anabat Swift detectors were installed at probable flightlines/foraging areas and left to collect data for a minimum of five consecutive nights per month from May to October 2021 inclusive. Refer to Drawing 1 and Table 2-2~~Table 2-2~~ for locations.

Table 2-2
2022 Anabat Swift Location Details (18-32)

No	Easting	Northing	Location Description

No	Easting	Northing	Location Description
18	610655	227842	Facing south. Attached to an elder tree within a hedgerow, with a waterbody to the west. Surrounded by grassland and cropland.
19	610968	228121	Facing northeast. Attached to an alder tree on a sloping ditch, adjacent to waterbody in the east used for fishing, surrounded by cropland and grassland.
20	611090	227259	Facing northwest. Attached to an oak tree within a field surrounded by cropland and grassland.
21	609639	227466	Facing north. Attached to a hawthorn tree in a small strip of woodland surrounded by cropland.
22	608145	227750	Facing north. Attached to an oak tree within a tree line surrounded by cropland.
23	608240	228105	Facing northwest. Attached to a willow tree adjacent to Spratts Lane, surrounded by agricultural fields.
24	608683	228357	Facing east. Attached to an oak tree within a line of trees surrounded by cropland.
25	607255	227490	Facing northeast. Attached to an elder tree in a small woodland pocket with waterfilled ditch running to north and west, surrounded by cropland and arable margins.
26	610488	228118	Facing northeast. Attached to a hawthorn tree within a line of trees on the edge of a ditch surrounded by crop fields.
27	607892	229177	Facing east. Within a hedgerow along an overgrown public footpath which does not appear to be used. Opposite a horse field to the southeast and cropland to the north.
28	607702	229549	Facing north. Attached to an oak tree surrounded by crop fields.
29	607421	229255	Facing north. Attached to a hawthorn tree within a hedgerow bordering cropland.
30	607603	228926	Facing north. Attached to an oak tree within the edges of public footpath Barn Lane to the south.
31	608176	228746	Facing east. Attached to a young ash tree in a small section of planted woodland with crop fields surrounding.
32	608365	229254	Facing north. Attached to an ash tree in a small section of planted woodland with crop fields surrounding.
33	611635	227921	Facing north. Attached to ash tree, within an area of planted woodland bordering a crop field.

2.2 Data Analysis

This report refers to 'registrations' or "bat passes"; that is a single sound file captured by an automated detector. It is important to note that registrations do not necessarily relate to the numbers of bats that may be present; a large number of registrations can equally result from one bat passing a detector many times/feeding overhead, or many bats passing at once.

Due to the large dataset (over 150,000 passes, not including noise) the activity survey data was analysed using Wildlife Acoustics Kaleidoscope Pro software and the Bats of Europe 5.4.0 auto-id classifier, set to the United Kingdom. This software allows data to be classified automatically with bat species which fit the same call characteristics that each call file provides. While the software is efficient, it is not totally infallible, therefore the following manual checks by an experienced bat worker skilled in bat call identification at SLR were also undertaken as follows:

- All locally rare/previously unrecorded species: Alcathoe bat (*Myotis alcathoe*), Bechstein's bat (*Myotis bechsteinii*), Leisler's bat (*Nyctalus leisleri*), Nathusius' pipistrelle (*Pipistrellus nathusii*), serotine (*Eptesicus serotinus*), barbastelle (*Barbastella barbastellus*), grey long-eared (*Plecotus austriacus*) bat auto-ids. If incorrect, these were manually corrected;

- Auto-id results for noctule *Nyctalus noctula* and brown long-eared bat *Plecotus auritus,* were also manually corrected if wrong;

- The auto id function labels files which it cannot identify to species level (but calculates could be a bat) in a 'No ID' category. All of these were manually checked and identified; and

- 5% each of the auto-id results for myotis species not listed above and 3% of common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus*. These were not manually corrected if wrong (due to the large number of registrations), but the process enabled verification of the error rate of the software (refer to 2.3.3 for details).

Russ[3] was used as the main reference text for the above process, in addition to Marckmann and Burkard Pfeiffer[4], and Middleton *et al*[5]. When interpreting the data, the following premise was used:

- Due to the difficulties of separating Myotis species from sonograms alone, Myotis calls have not been manually identified beyond genus level, with the exception of Bechsteins and Alcathoe identified by the auto id;
- For the purpose of differentiating pipistrelle bat species, characteristic peak frequencies for each of the species has been used as an initial indicator (for soprano pipistrelle above 50khz, common pipistrelle between 41khz and 50khz and Nathusius' pipistrelle below 40khz). For calls falling within or at close proximity to 40-41khz or, at or in near proximity to 50khz, a classification has been made based on

[3] Russ, J. (2021): Bat Calls of Britain and Europe: A guide to species identification, Pelagic Publishing, ISBN 978-1-78427-225-8
[4] Marckmann, U. and Pfeiffer, B. (2020) Determination of bat call recordings and criteria for the evaluation of acoustic species evidence Part 1 - Genera Nyctalus, Eptesicus, Vespertilio, Pipistrellus (nyctaloid and pipistrelloid species), barbastelle, long-eared bats and horseshoe bats in Bavaria, Bavarian State Office for the Environment. Translated by David Lee at https://batability.co.uk/wp-content/uploads/2020/08/Analysis-of-Batcalls-1.pdf
[5] ; Middleton, N., Froud, A. and French, K (2014) Social Calls of the Bats of Britain and Ireland. Pelagic Publishing

several factors, including the broader dataset, inferred knowledge of the bats' surroundings and the effect this has on the call structure and other measured parameters. Pipistrelle registrations may however remain ambiguous, such registrations were instead assigned to "pipistrelle species"; and

- Nyctalus and Eptesicus calls can easily be misclassified; particularly those recorded when the bats are in 'closed' or a cluttered environment. Due to the similarity of the calls, it is not always possible to accurately differentiate between the three species and in such cases, they have been labelled as "big bat" in the analysis.

All data recorded by the detectors was subject to analysis to determine if uncommon species were present. However, for ease of data evaluation between locations, five nights per location per month were subject to scrutiny (even where more than five nights may have been recorded). The table below details which nights were used generally the first five per month, but amended if detectors failed to record due to malfunction. Entries with bold text are when less than five nights data was obtained (refer to the limitations described in Section 2.3.2 for further details).

Table 2-3
Nights used for Data Evaluation

Location	May	Jun	Jul	Aug	Sept	Oct
18	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**Nil** **0 nights**	8th – 12th 5 nights	7th – 11th 5 nights
19	**11th – 12th** **2 nights**	**9th – 11th** **3 nights**	1st – 5th 5 nights	**9th – 11th** **3 nights**	**8th – 9th** **2 nights**	**Nil** **0**
20	11th – 15th 5 nights	9th – 13th 5 nights	**1st – 2nd** **2 nights**	**9th – 10th** **2 nights**	**8th – 10th** **3 nights**	**Nil** **0**
21	**Nil** **0**	15th – 19th 5 nights	1st – 5th 5 nights	**9th – 10th** **2 nights**	**8th – 10th** **3 nights**	**Nil** **0**
22	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th – 10th** **2 nights**	**8th – 9th** **2 nights**	7th – 11th 5 nights
23	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th X** **1 night**	**8th – 10th** **3 nights**	**Nil** **0**
24	11th – 15th 5 nights	**9th – 10th** **2 nights**	1st – 5th 5 nights	**9th – 10th** **2 nights**	**8th – 9th** **2 nights**	**Nil** **0**
25	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th – 11th** **3 nights**	**8th – 11th** **4 nights**	**Nil** **0**
26	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th –11th** **3 nights**	8th – 12th 5 nights	**Nil** **0**
27	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th – 11th** **3 nights**	**Nil** **0**	**Nil** **0**
28	11th – 15th	9th – 13th	1st – 5th	**9th – 10th**	**8th – 10th**	7th – 11th

Location	May	Jun	Jul	Aug	Sept	Oct
	5 nights	5 nights	5 nights	**2 nights**	**3 nights**	5 nights
29	**Nil** **0**	9th – 13th 5 nights	1st – 5th 5 nights	**9th – 12th** **4 nights**	8th – 12th 5 nights	7th – 11th 5 nights
30	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th** **1 night**	**9th – 10th** **2 nights**	7th – 11th 5 nights
31	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th** **1 night**	**8th** **1 night**	7th – 11th 5 nights
32	**Nil** **0**	9th – 13th 5 nights	1st – 5th 5 nights	**9th** **1 night**	8th – 13th 5 nights	7th – 11th 5 nights
33	11th – 15th 5 nights	9th – 13th 5 nights	1st – 5th 5 nights	**9th – 12th** **4 nights**	**8th – 10th** **3 nights**	7th – 11th 5 nights

2.3 Limitations

The following subsections detail the survey constraints encountered. None are considered to significantly affect the conclusions of this report; the data gathered are sufficient to meet the aims set out at Section 1.2.

2.3.1 Field Surveys: Roost Assessment

Limitations to surveys are noted in detail, where applicable, in the tables at Appendices A - D.

In summary, constraints were noted on several of the surveys, such as trees being unsafe to climb, features being too extensive to be fully inspected, or active bird nest present at time of survey. On the few occasions where the limitation was considered to have significantly affected the survey, an additional visit was subsequently made. This is therefore not considered to be a limitation.

In some instances, survey access was refused, however this did not affect any trees within the RLB and as such is not considered to be a limitation. Trees within exclusion areas or outside of the RLB were not subject to detailed survey since they are not anticipated to be directly impacted. This is not considered to be a limitation.

As already stated, spacing of some presence/absence surveys were less than 15 days apart during June – August 2023. This is not considered to affect the chances of detecting bat presence compared to spacing surveys 15 days (or more) apart, and is not therefore considered to be a limitation. Furthermore, any such trees were subject to an additional presence/absence survey in June 2023.

A total of 27 trees within the RLB were not subject to survey in 2022 due to a mapping error that was picked up too late to respond to. All these trees are located within the same hedgerow within which static detector 22 was deployed, and along which a transect was walked. In June 2023 the trees were subject to a PRA and PRF assessment, this is therefore not considered to be a limitation.

Taking into account the above points, the scope of surveys and breadth of data gathered is considered sufficient to meet the objectives in section 1.2.

2.3.2 Field Surveys: Activity Survey

Due to project timescales, activity survey commenced in May, rather than in April as recommended in the 2016 BCT Guidelines. This resulted in a smaller dataset for each location and no data for bat presence in April.

All detectors failed to record for the full 5 nights per month at some point during the full monitoring period. This was due to a number of factors, which are summarised below:

- Access to deploy a detector at location 29 and 32 was not possible in May due to inability to obtain consent from landowners;
- Access to locations 19 – 21 and 23 – 26 was not possible in October;
- September/October – location 27 was removed from the survey scope;
- Periods of wet weather causing high numbers of files (i.e. rain noise) affected the writing of data to the SD card. This was a particular issue in August;
- Wet weather also affected some detectors' microphones, such that they failed intermittently or just picked up noise; and
- In May detector 21 experienced a software/electrical fault resulting in the unit failing to boot up correctly.

Whilst the losses of data outlined above are unfortunate, in our experience some data loss is inevitable when using equipment of this nature over such long time periods and the levels of data loss are not unusual. The data obtained are extensive and considered sufficient to provide a robust baseline dataset to meet the objectives set out in section 1.2.

During transect 10 on 28th September and transect 11 on 29th September, the temperature during survey was less than 10˚C recommended as optimal in the survey guidelines, however guidance does recognise that in spring and autumn optimal conditions can be rare and the information gathered during these surveys provides insights into how bats respond to poorer conditions. The data collected is considered robust and represents typical weather conditions across the season.

2.3.3 Data Analysis

It should be noted that Kaleidoscope Pro filters only give an estimate of the bat activity in a dataset. Faint or poor-quality bat sonograms can be missed if they are rejected by the noise filter. However, this is considered unlikely to affect the results significantly.

As noted in Section 2.2**Error! Reference source not found.**, a 5% or 3% manual check was made against the auto-id outputs to determine the error rate of the software in this instance. Table 2-4~~Table 2-4~~ shows the result of the check.

Table 2-4
Results of 5%/3% auto-id check

Species	% incorrectly classified by auto-id	Note
Common pipistrelle	0.69%	Incorrectly classified pass was a soprano pipistrelle
Soprano pipistrelle	0.31%	Incorrectly classified passes were noise and a common pipistrelle
Myotis	0	-

The above result has been used when evaluating the results for these species, and as such is not considered to significantly affect the conclusions.

2.3.4 Summary

The survey effort is deemed proportionate to the scheme and the potential impacts, departure from the 2016 BCT Guidelines is considered justified in this instance, for reasons set out above. No significant survey limitations were encountered during the bat survey; the level of survey is considered to be sufficient to meet the aims set out in Section 1.2 above.

3.0 Results

3.1 General Species Summary

Based on data gathered during the field survey, at least nine bat species have been recorded within the study area, and are listed below:

- Common pipistrelle;
- Soprano pipistrelle;
- Nathusius' pipistrelle;
- Pipistrelle species *Pipistrellus spp.*;
- Brown long-eared bat;
- Serotine;
- Noctule;
- Leisler's bat;
- 'Big bat species';
- Barbastelle; and
- Myotis species *Myotis spp*.

The auto id function on Kaleidoscope Pro also suggests the presence of the following species of myotis bat in order of prevalence:

- Daubenton's bat *Myotis daubentonii*;
- Natterer's bat *Myotis nattereri*; and
- Whiskered bat *Myotis mystacinus*

The survey area includes numerous habitats that are suitable for use by commuting and foraging bats, such as hedgerows, woodland edges, watercourses and wetlands. Full details of the habitats present at the survey area are included in the habitat report appended to the ES[6].

3.2 Woodland Preliminary Roost Assessment

The location of each of the 21 woodlands subject to assessment is shown on Drawings 1 and 2. Results are presented in Table 3-1 below.

[6] For a copy of the Habitat and Hedgerow Survey undertaken in 2022 refer to Five Estuaries Offshore Wind Farm Environmental Statement Volume 5, Annex 4.2.

Table 3-1
Woodland Preliminary Roost Assessment Results

Woodland reference	Date (2022)	Surveyor Name	Species Present	Trees in 10m^2	% with PRF	PRF Types	Preliminary Woodland Category	Notes
26	13/07	Emily Drinkwater	Oak	1	80	Rot hole, callus roll, branch end cavity/cracks	Moderate	Five mature oak trees and scrub
29	14/07	Ellen Miller	Willow	10	0	N/A	Negligible	None.
33	16/06	Emma Clarke	Willow, poplar, alder, oak	8	10	Rot hole, woodpecker hole, large hollow, lifted bark	High	Wood is mostly tall straight poplar and alder with no PRF but there is a fallen willow on NW edge (rotting) with PRF, on edge of pheasant coop there is a tree with lifting bark and woodpecker hole, plus woodpecker feeding hole found on dead tree. Oak in south west with tear out and ash with deep looking knot holes. Mature oaks to south west.
34	16/06	Emma Clarke	Oak	5	1	Rot hole, callus roll, branch end cavity/cracks	Low	Most trees fairly young, in good condition, one mature oak with upward facing callus roll, some younger trees with small knot holes/dead branches.
35	N/A							Within exclusion area – not subject to survey
36	N/A							Within exclusion area – not subject to survey
37	N/A							Within exclusion area – not subject to survey
38	N/A							Within exclusion area – not subject to survey

Woodland reference	Date (2022)	Surveyor Name	Species Present	Trees in 10m^2	% with PRF	PRF Types	Preliminary Woodland Category	Notes
39	N/A							Within exclusion area – not subject to survey
41	15/06	Amy Gill	Horse chestnut, apple	3	10	Rot hole, callus roll, woodpecker hole	High	Not really a wood, but a couple of apple trees spotted on the west boundary with high potential.
42	15/06	Amy Gill	Oak, birch	4	40	Rot hole, callus roll, unspecified (large tree)	High	Small parcel of woodland, mostly consisting of oak. A couple of mature oaks with features and a birch on the north edge with features.
47	13/07	Ellen Miller	Ash, Birch (any), Cherry, Oak, Poplar (any)	10	5	Callus roll, rot hole	Low	Shelter belt planting of poplar on E side with silver birch in the middle and young oak and hazel on W side. Semi native trees with average dbh 10cm and max 40cm. Several Lombardy poplar further S. ~5 of poplar in N section had PRF - rot holes, other trees too young mostly.
48	N/A							Access refused for survey. Outside RLB, within 100m.
50	13/07	Ellen Miller	Ash, Oak, Poplar (any), Scots pine, field maple	10	5	Rot hole	Low	None.
51	15/06	Amy Gill	*Tilia* sp	10	80	Rot hole, callus roll, woodpecker hole	High	Line of line trees. Many have woodpecker holes, rot holes and callus rolls.
52	13/07	Ellen Miller	Ash, Oak,	10	2	Rot hole	Low	Young trees (signs say 2002) dbh average 10-

Woodland reference	Date (2022)	Surveyor Name	Species Present	Trees in 10m^2	% with PRF	PRF Types	Preliminary Woodland Category	Notes
			Scots pine					15 cm. very few rot holes found on some trees but all shallow /sealed. Scots pine on E side then oak and ash on W side.
54	13/07	Ellen Miller	Ash, Oak, Scots pine	10	2	Rot hole	Low	As above.
56	N/A							Access refused for survey. Outside RLB, within 100m.
57	N/A							Access refused for survey. Outside RLB, within 100m.
58	N/A							Access refused for survey. Outside RLB, within 100m.
59	13/07	Ellen Miller	Poplar	10	20	Callus roll, rot hole	Moderate	Line of *Populus* - dbh up to 40 cm some with extensive ivy that may hide PRFs.

3.3 Tree Roost Assessment

The PRA identified 565 trees within the survey area; 31 trees with high potential, 65 with moderate potential, 37 with low potential and 361 with negligible potential. The remaining trees were not surveyed (refer to section 2.3 for details). The location of each tree is shown on Drawings 1 and 2 and provided in Appendix A. Trees with negligible or low potential to support bats are not dealt with in detail in this report since they are not a critical part of the overall potential roost resource.

The raw data from surveys at moderate and high potential trees are included as follows:

- Appendix B: Results from Potential Roost Feature (PRF) assessment at moderate and high potential trees;
- Appendix C: Results from dusk emergence and/or dawn re-entry survey at moderate and high potential trees; and
- Appendix D: Results synopsis for moderate and high potential trees.

Roosting bats were confirmed at tree numbers 1030, 1316, 1330 which are further described below and shown on Drawing 2.

- Tree 1030 – During the tree climb inspection on 15.07.22 a Natterer's bat was found within a rot hole on an ash tree, at around 4m high on a branch, the feature opening (5x3cm) faced south. The cavity was very tight inside, trending upwards and around to the side after a short distance, only one bat could be seen using an endoscope. The dusk emergence/dawn re-entry surveys on 02.08.22 and 06.09.22 did not note any roosts, or any Natterer's bat activity. The roost is therefore considered to be a natterer's day roost.

Photograph 3-1
Tree 1030, Occupied roost

- Tree 1316 – At dusk on 19.07.22 one soprano pipistrelle emerged from central area of tree, exact emergence point uncertain. Emergence/re-entry surveys on 12.08.22 and 16.08.22 found no evidence of roosting. Assessed as soprano pipistrelle day-roost.

Photograph 3-2
Tree 1316

- Tree 1330 – During the tree climbing bat survey on 11.07.22 a pipistrelle bat was found in a rot hole on the south aspect of a branch, about 8m above ground. The bat was found at around 35cm inside the cavity. No roosts were observed on the dusk emergence/ dawn re-entry surveys carried out on 19.07.22 and 12.08.22. It is thought to be a pipistrelle day-roost. During the climbing survey on the 26.06.2023 a single bat was recorded in the same feature, and was also considered to be a pipistrelle bat.

Photograph 3-3
Tree 1330, Occupied roost 2022

Photograph 3-4
Tree 1330, Occupied roost 2023

3.4 Activity Survey: Transects

Full details of the transect surveys conducted each month from April to October 2022 are included at Appendix E. The main purpose of walked transects is for surveyors to observe bat behaviours and numbers of bats (i.e. those elements that an automated detector cannot). In summary, the surveyors usually saw one or two bats at any one time, there were never more than two observed on one occasion. On no occasions was a roost detected or suspected, all behaviours were foraging and commuting related usually along a hedgerow, woodland or watercourse. Since only low numbers of bats were observed or recorded, it has not been possible to discern the presence of any well used flight lines.

The data recorded on the Batlogger M detectors was subject to analysis and the results are summarised in the tables below. Table 3-2~~Table 3-2~~ shows the total bat passes for each transect route when all recording nights (i.e., 6 per transect) throughout the year are combined.

Table 3-2
Total bat passes per transect, by species, all months combined.

Species	Transect 9	Transect 10	Transect 11
Common pipistrelle	532	339	292
Soprano pipistrelle	125	126	187
Nathusius' Pipistrelle	21	1	0
Pipistrelle species	0	0	1
Brown long-eared bat	2	1	2
Myotis species	2	0	0
Barbastelle	2	1	1
Noctule	2	2	3
Leisler's bat	1	1	0
Serotine	0	1	1

Due to the differences in detectability between species (noctule is for example a very loud bat, brown long-eared bats are very quiet and most often missed) it is important not to compare the number of passes between species in the above table. It does however serve to show that common and soprano pipistrelle, noctules, brown long eared and barbastelle bats were detected at all transects, at 9 and 10, Nathusius' pipistrelle and Leisler's bat, at 10 and 11, serotine and myotis species at transect 9 only.

Additional evaluation of the transect data has not been considered worthwhile, due mainly to the significantly greater amount of sound data gathered via automated detectors which is presented below, and therefore has not been undertaken.

3.5 Activity Survey: Automated

3.5.1 Overview

The data gathered during the automated activity survey amounts to a very large dataset, which has been retained electronically. The data has been used to answer the following questions:

1 What species are present at each location?

2 Where is greatest and least bat activity (all species combined) recorded?

3 For noctule, serotine, Leisler's, brown long eared, barbastelle, Nathusius' pipistrelle and Myotis species where is greatest and least bat activity (by species) recorded?

For the third point, these species have been selected for more focussed investigation due to their local rarity and/or reliance on trees for roosting and/or hedgerows for commuting. Remaining species (common pipistrelle and soprano pipistrelle) are considered to be sufficiently well addressed by the "all species" points numbers 1 and 2 above.

3.5.2 Species present at each location

The following species were recorded at all locations:

- Noctule;
- Common pipistrelle;
- Soprano pipistrelle;
- Brown long-eared bat; and
- Myotis species - Due to difficulties in separating myotis species by call parameters alone, they are dealt with as a genus in this report. However, it is worth noting that the auto-ID software identified the following separate species:
    - Daubenton's bat;
    - Natterer's bat; and
    - Whiskered bat.
- 'Big Bat' species were recorded at every location, these were indistinguishable calls of either noctule, serotine or Leisler's bats.

Additionally;

- Serotine bats were recorded at all locations except for location 19, 22, 28 and 32;
- Nathusius' pipistrelle were recorded at all locations except for 21 and 25;
- Barbastelle were recorded at every location except for 18 and 19; and
- Leisler's bat was recorded at location 27 (single pass only).

3.5.3 Activity by location (all species combined)

Bat activity was recorded on every night at every location. Figure 3-1**Error! Reference source not found.** provides an overview of bat activity as a whole (i.e., all species combined) at each location.

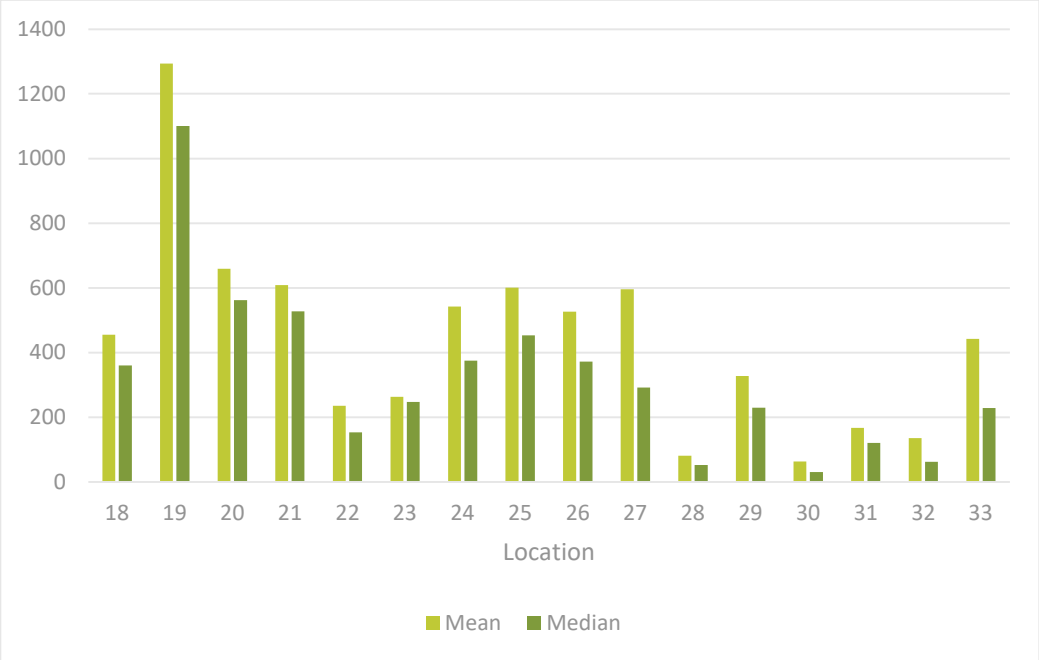
In order that a direct comparison of data may be undertaken, which takes into account differences in data

losses at each recording location, the graph presents the average (or mean) number of bat passes per night, over the recording period. The median number of passes per night are also presented in order to put the mean into context. Where the median differs from the mean the data is 'skewed'; a higher mean represents increased levels of activity on fewer nights rather than more constant activity levels each night.

The trends shown on Figure 3-1 are primarily as a result of common and soprano pipistrelle bat activity, but also include all other bats species.

As is evident, location 19 had the highest mean number of bat passes per night (>1200), locations 18, 20, 21, 24, 25, 26, 27 and 33 all had a mean between 440 and 660 passes per night, whilst remaining locations show relatively low mean bat passes per night in comparison (>330).

Figure 3-1
Bat Activity (all species combined) per Location: Mean and Median Bat Passes per Night



The high number of average calls per night at location 19 was further investigated within the data and was found to be due to high numbers of passes (>1000) soprano pipistrelle bats on 12th May 2022 and throughout the June recording period. At this location average passes per night for soprano pipistrelle are higher than common pipistrelle, this is the opposite at all other locations. Both species are recorded at each location on almost every night (bar one).

3.5.4 Noctule

Figure 3-2 shows the average number of noctule passes recorded per night at each location as mean and median values.

Figure 3-2
Noctule Activity per Location: Mean and Median Bat Passes per Night

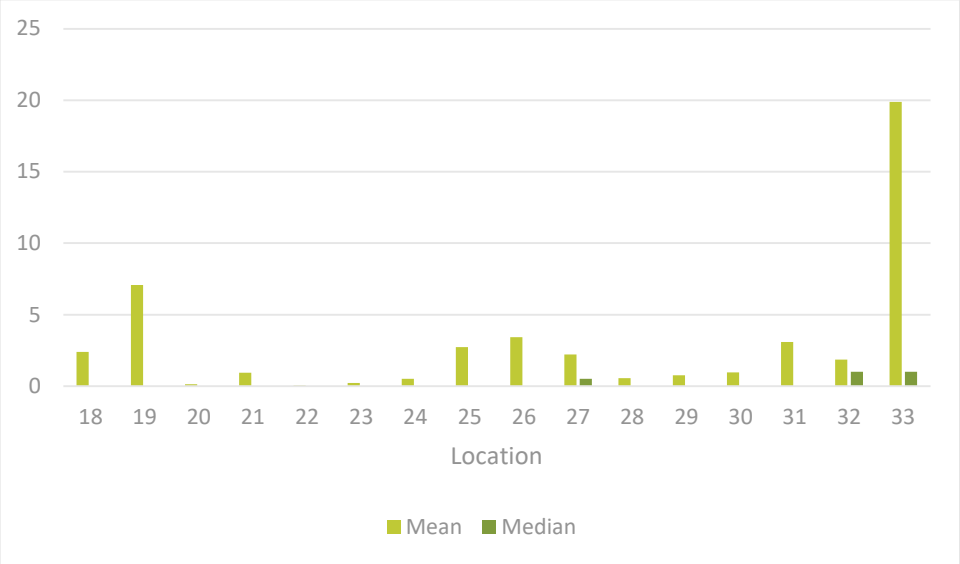


Table 3-3 shows the mean noctule activity per location, and median and maximum values to put the mean into context.

Table 3-3
Noctule Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	2.4	7.1	0.1	0.9	0.04	0.2	0.5	2.7	3.4	2.2	0.6	0.8	1.0	3.1	1.9	19.9
Median	0	0	0	0	0	0	0	0	0	0.5	0	0	0	0	1	1
Max	44	53	2	3	1	1	3	17	25	9	5	7	5	46	11	209

The graph shows that the highest level of noctule activity was recorded at location 33, with a mean of approximately 20 passes registered per night of recording. The median value however is 1, this shows that on the majority of nights there was low activity. Interrogating the data for location 33 in more detail shows that this peak is largely attributable to activity on two consecutive nights in July. On the night of 1st July 2022 there were 152 passes on the 2nd there were 209, which was the highest number for any location throughout the recording period, as shown by Table 3-3. For 1st July 2022, sunset is at 21:39 and sunrise is 04:53 the majority of calls were recorded between 21:52 and 22:37 and again at 03:29 and 04:05. This is similar on the 2nd July 2022, with calls bar one recorded between 21:42 and 22:19 and then again at 03:42 until 04:09.

Location 19 recorded the second highest amount of activity for noctules with average number of passes per night at 7.1. The median was 0 showing that on most nights no noctule passes were recorded. There were increased levels of activity in August and June, where on one night 53 passes were recorded.

Noctules were recorded at all locations, the low medians show that for most nights no or low levels of activity were recorded however there are various nights at various locations with increased activity, as is shown by

Table 3-3.

It is worth noting that there were bat calls which were labelled 'big bat' in the call analysis, some of these are likely to be noctule bats and are therefore not represented in Figure 3-2 and Table 3-3. Further analysis of the 'big bat' calls is provided in Section 3.5.7.

3.5.5 Serotine Bat

Figure 3-3 shows the average number of serotine passes recorded per night at each location as mean and median values.

Figure 3-3
Serotine Activity per Location: Mean and Median Bat Passes per Night

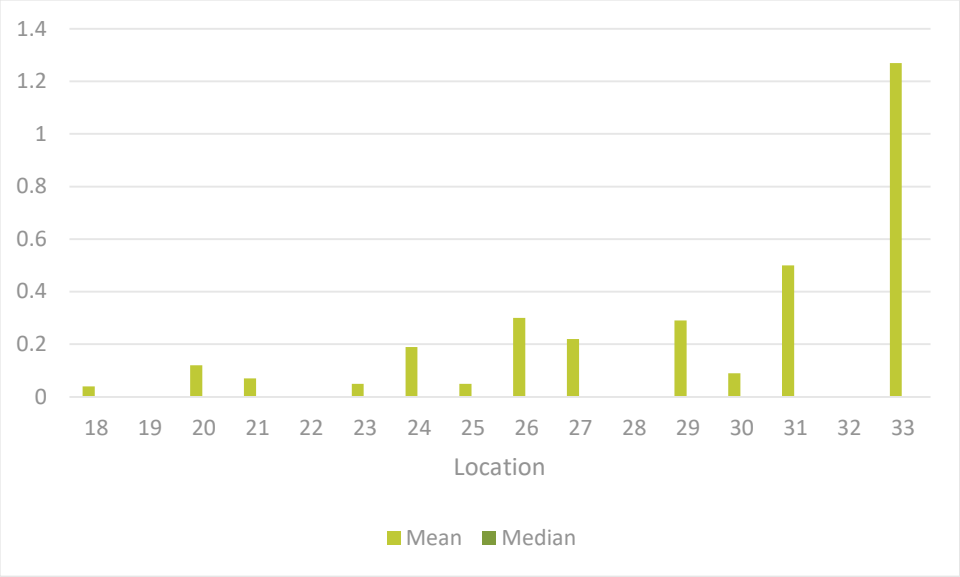


Table 3-4 shows mean serotine activity per location, and median and maximum values to put the mean into context.

Table 3-4
Serotine Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	0.04	0	0.12	0.1	0	0	0	0	0.3	0.2	0	0	0.1	0.5	0	1.3
Median	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	1	0	2	1	0	1	1	1	4	2	0	4	1	3	0	8

Serotine bats were recorded at 12 out of 16 of the recording locations. Numbers were generally low, with the median for all locations at 0, showing that on the majority of recording nights no serotine activity was recorded. Figure 3-3 shows a peak in activity at location 33, however this only equates to an average of 1.3 passes per night. The slightly higher mean can be attributed to increased activity in between the 1st and 4th July

2022, where each night 6-8 passes were recorded. Over the full monitoring period, 8 passes were the maximum recorded in one night as shown in Table 3-4.

It is worth noting that there were bat calls which were labelled 'big bat' in the call analysis, some of these may be serotine bats and are therefore not represented in Figure 3-3 and Table 3-4. Further analysis of the 'big bat' calls is provided in Section 3.5.7.

3.5.6 Leisler's bat

During the survey period, one Leisler's bat pass was recorded. This was at Location 27 on 5th of July 2022.

Due to only one pass being recorded further analysis is not possible in terms of providing any further insights into seasonal or spatial trends.

3.5.7 Big bats

Figure 3-4 shows the average number of 'big bat' passes recorded per night at each location as mean and median values.

Figure 3-4
'Big bat' Activity per Location: Mean and Median Bat Passes per Night

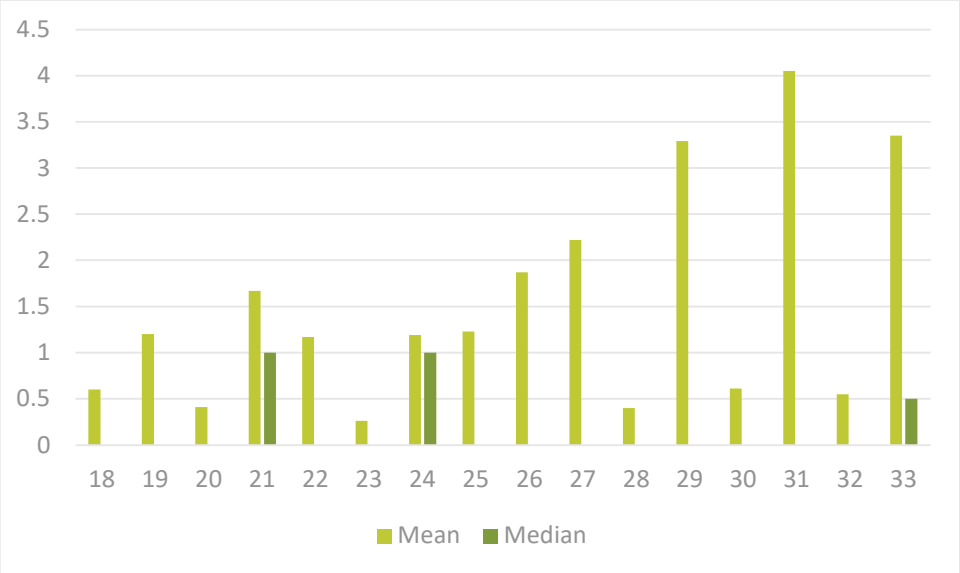


Table 3-5 shows mean 'big bat' activity per location, and median and maximum values to put the mean into context.

Table 3-5
'Big bat' Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	0.6	1.2	0.41	1.67	1.17	0.26	1.19	1.23	1.87	2.22	0.4	3.29	0.61	4.05	0.55	3.35
Median	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0.5

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Max	10	8	4	12	19	2	8	8	15	15	2	34	4	49	4	37

The species group 'big bats' may include noctule, Leisler's or serotine bats, whose calls were not identifiable to species level. These calls were recorded at all locations at relatively low levels, the highest mean number of passes recorded is at location 31, the median is 0, and the higher mean can be attributed to increased activity on 4th and 5th July 2022 where 49, followed by 33 passes were recorded, this co-insides with a peak of activity for noctules with 46 recorded on the 4th. There are also three serotine passes recorded on the 4th, they were recorded towards the middle of the evening (23:25, and two registrations at 02:08), whereas noctule are between 22:10 and 22:51, 03:45 and 04:01. Big bat calls fall in-between many of the noctule registrations.

Figure 3-4 shows that there are also slightly higher mean passes at locations 29 and 33. Table 3-5 shows that at location 29 the maximum is 34 passes, this was recorded on 12th August 2022, noctule and serotine are recorded in low numbers, big-bat calls may represent either species. At location 33, higher levels of activity in July co-inside with increased noctule and serotine activity on the same nights. It is thought likely that the big bat calls represent passes from both species, with a higher proportion belonging to noctule bats.

3.5.8 Barbastelle bat

Figure 3-5 shows the average number of barbastelle bat passes recorded per night at each location as mean and median values.

Figure 3-5
Barbastelle Activity per Location: Mean and Median Bat Passes per Night

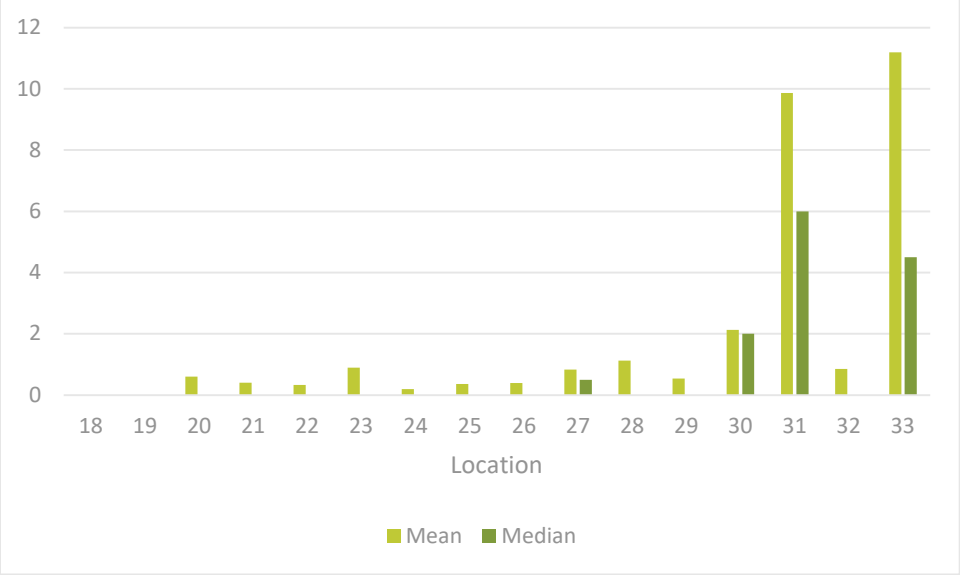


Table 3-6 shows mean barbastelle activity per location, and median and maximum values to put the mean into context.

Table 3-6
Barbastelle Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	0	0	0.6	0.4	0.33	0.89	0.19	0.36	0.39	0.83	1.1	0.5	2.1	9.86	0.9	11.19
Median	0	0	0	0	0	0	0	0	0	0.5	0	0	2	6	0	4.5
Max	0	0	1	2	2	7	1	2	4	2	16	3	7	90	13	63

Barbastelle bats were recorded at all locations aside from 18 and 19. Figure 3-5 shows that there is a significantly higher level of activity at locations 31 and 33. The higher median at 31 also shows slightly more constant levels of activity throughout the recording period. At location 31 there is a peak of activity on 12th May with 90 passes recorded over the night. The activity was recorded between 21:30pm and 02:50am (beginning 33 minutes after sunset), there is also increased activity on the 13th May 2022 recording 25 passes in a similar time frame. At location 33 there are peaks in activity through May and June, with several nights recording between 15 and 40 passes, the maximum number of passes recorded on any one night was on 13th June 2022 where 63 passes were recorded. These passes occurred between 22:50pm and 01:45am (beginning 1 hour 14 minutes after sunset).

The third highest level of activity was at location 30 where the mean and median are both around 2 passes per night. When interrogating the data further, barbastelle passes (around 1-7 passes per night) occur almost every night (bar one) throughout May – September at location 30 and then no passes are recorded in October.

3.5.9 Myotis species

Figure 3-6 shows the average number of Myotis species passes recorded per night at each location as mean and median values.

Figure 3-6
Myotis species Activity per Location: Mean and Median Bat Passes per Night

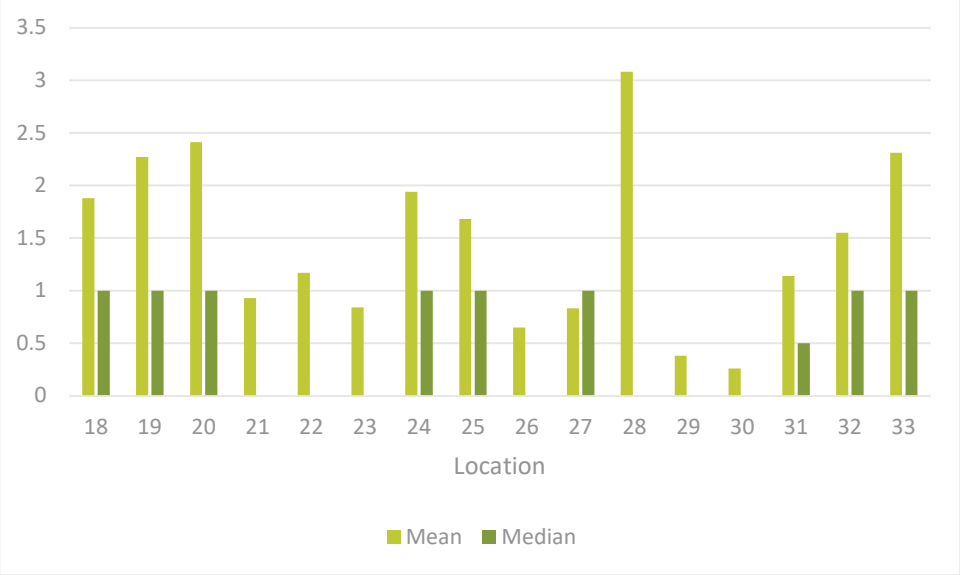


Table 3-7 shows mean Myotis species activity per location, and median and maximum values to put the mean into context.

Table 3-7
Myotis Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	1.88	2.27	2.41	0.93	1.17	0.84	1.94	1.68	0.65	0.83	3.1	0.4	0.3	1.14	1.6	2.31
Median	1	1	1	0	0	0	1	1	0	1	0	0	0	0.5	1	1
Max	7	11	14	8	7	10	7	10	4	2	28	1	3	7	6	9

As shown in **Error! Reference source not found.** myotis species were recorded at all locations, however the medians show that for locations 21-23, 26 and 28-30 at least half of recording nights registered no Myotis passes. Highest mean average number of passes were recorded at location 28, however this only averages at 3.1 passes per night. The median is 0 and the slightly increased mean is due to three nights of increased activity in May, with the highest count per night being 28. This was the maximum count for all locations across the recording period.

3.5.10 Nathusius' Pipistrelle

Figure 3-7 shows the mean number of Nathusius' pipistrelle passes recorded per night at each location as mean and median values.

Figure 3-7 Nathusius' Pipistrelle Activity per Location: Mean and Median Bat Passes per Night

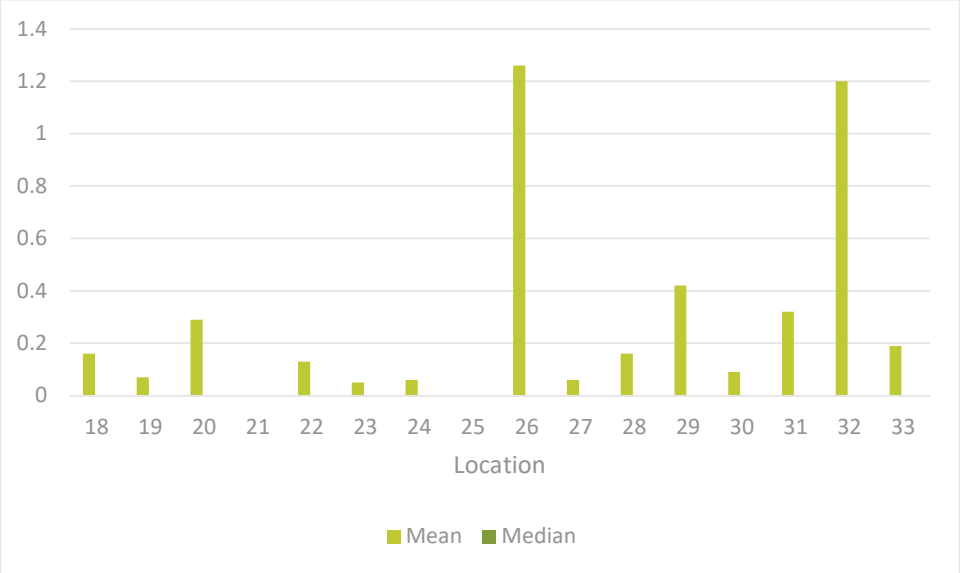


Table 3-8 shows mean Nathusius' pipistrelle activity per location, and median and maximum values to put the mean into context.

Table 3-8 Nathusius' Pipistrelle Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	0.16	0.07	0.29	0	0.13	0.05	0.06	0	1.26	0.06	0.2	0.4	0.1	0.32	1.2	0.19
Median	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Max	2	1	1	0	2	1	1	0	16	1	2	3	1	3	17	2

Limited activity by Nathusius' pipistrelle was recorded at the majority of the locations, in most cases this being just one or two passes across the recording period. Locations 21 and 25 recorded no Nathusius' pipistrelle passes.

The highest level of overall activity for this species was at locations 26 and 32. At location 26 increased activity on two nights on 9th June 2022 (16 passes) and 11th June 2022, skew the average, whereas all other night's record no or just one pass. The calls on the 9th were recorded between 22:35pm and 02:10am (beginning 1 hour 2 minutes after sunset). At location 32, there is increased activity on 1st July 2022 with 17 passes were recorded, these occurred in a short time period between 22:47 and 23:05.

As described in Section 2.2, discriminating between common pipistrelle and Nathusius' pipistrelle can be difficult, and at Location 26 in particular there were calls auto-identified as Nathusius' pipistrelle or 'no id', a relatively large proportion of which were later assigned to "Pipistrelle species" as they could not be confidently discriminated between. It is considered possible that Nathusius' pipistrelle are more frequently present at Location 26, and/or with a greater level of activity than is evident in the above graph.

3.5.11 Brown Long-eared Bat

Figure 3-8 shows the mean number of brown long-eared bat passes recorded per night at each location as mean and median values.

Figure 3-8
Brown Long-eared Bat Activity per Location: Mean and Median Bat Passes per Night

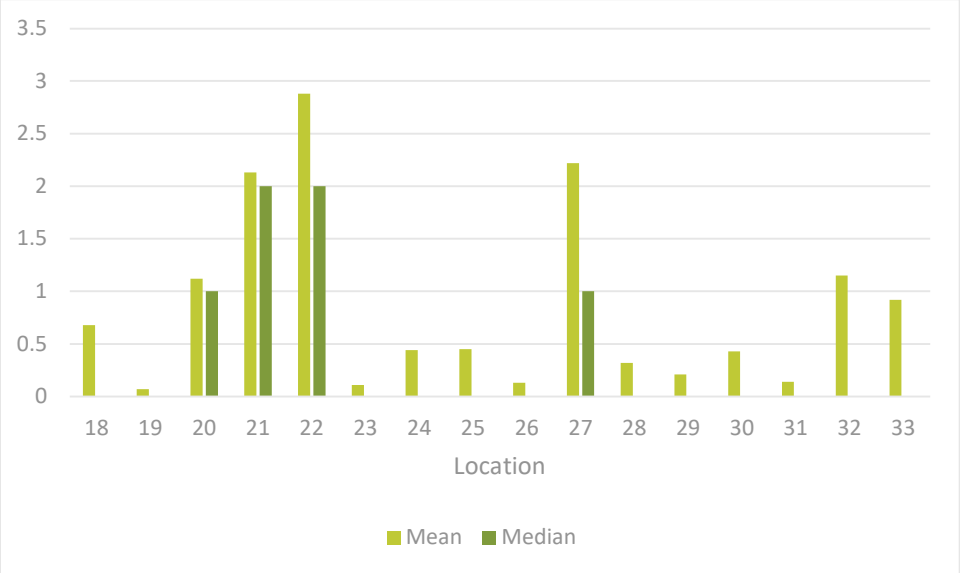


Table 3-9 shows mean brown long-eared activity per location, and median and maximum values to put the mean into context.

Table 3-9
Brown Long Eared Activity Per Location: Mean, Median and Maximum Bat Passes per Night

Location	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33
Mean	0.68	0.07	1.12	2.13	2.88	0.11	0.44	0.45	0.13	2.22	0.3	0.2	0.4	0.14	1.2	0.92
Median	0	0	1	2	2	0	0	0	0	1	0	0	0	0	0	0
Max	4	1	3	4	12	1	3	2	1	10	4	1	3	1	5	6

Figure 3-8 and Table 3-9 show that brown long-eared bats were recorded at each of the detector locations. There are apparent peaks in activity at locations 20-22 and 27, where on most nights at least one or more passes were recorded.

Brown long-eared bat social calls were picked up at Location 27 on the 2nd, 4th and 5th of July 2022. These were all recorded between the hours of 00:11 and 02:37.

4.0 Discussion & Evaluation of Results

The discussion below draws upon all survey information available in order to present a reasoned understanding of the bat species populations present at the survey area.

4.1 Common pipistrelle & soprano pipistrelle

4.1.1 Roosting

Common and soprano pipistrelle bats are crevice dwelling bat species and will utilise a wide range of roost types, including buildings and trees.

Two roosts were confirmed at two trees during the 2022 and 2023 surveys as follows:

- one soprano pipistrelle day-roost (Tree 1316); and
- one pipistrelle (not identifiable to species level) day-roost (Tree 1330).

These roosts are considered to be of low conservation significance[7].

4.1.2 Foraging

Common pipistrelle has a core sustenance zone (CSZ) of 2km and soprano pipistrelle of 3km. Both these species use a wide range of habitats, though soprano pipistrelles will tend to select riparian habitats over other habitat types available. All the recording locations are within the CSZ of at least one pipistrelle roost.

High numbers of soprano pipistrelle passes were recorded during the activity survey on the 12th of May 2022 and throughout June 2022 at detector location 19. Location 19 is next to a large waterbody, likely used as a foraging resource by the species.

Both species were recorded in all months at all locations. With peaks in activity across the survey area on particular nights. The mosaic of mature trees, watercourses, agricultural land and small woodlands present across the survey area is considered highly suitable for use by this species group.

4.2 Noctule

4.2.1 Roosting

Noctule is a large, high flying bat species that most commonly roost in trees. No noctule roosts were confirmed during the surveys in 2022 or 2023.

Noctule roost(s) are however considered highly likely to remain present in the vicinity of the scheme, based upon the cumulative information available, as follows:

[7] As per Figure 4 of *English Nature Bat Mitigation Guidelines*, January 2004.

- The automated survey data suggests that there is a roost in close proximity to location 33 with peaks in activity on the 1st and 2nd July 2022 within 15 minutes of sunset and peaking again towards sunrise. Location 33 is situated in a line of trees/mixed broadleaved woodland to the north of site. Higher levels were also recorded at Location 31, close-by, along the same woodland strip in July 2022. Additionally, during a dusk survey on 5th September 2022 of Tree 1496, a noctule was recorded 21 minutes after sunset. The tree is situated within the hedge located to the south of the woodland strip;

- During the dusk surveys of Trees 921, Tree 926 and Tree 930.1 noctule activity was noted within 40 minutes of sunset. Trees 921 and 926 are situated within 150m of a woodland parcel (Mulley's Wood) and 930.1 is approximately 530m away but connected to it via hedgerow and treeline;

- On the 20th July 2022, during a dusk survey of Tree 1199, Tree 1203 and Tree 1209 a noctule is first recorded 35 minutes past sunset. The trees are closest to Location 24 and are approximately 300m south of a small woodland parcel just outside of the RLB, adjacent to Jenning's Farm. On the 11th of August 2022 during a dusk survey of Tree 1212 a noctule was similarly recorded 44 minutes after sunset, this tree is in the same hedgerow/field boundary as 1199 and 1209;

- During a dusk survey of Tree 1330 a noctule is recorded 26 minutes after sunset, this tree is in very close proximity to Location 25, in the immediate area there are mature trees with high to moderate potential for roosting bats, where two of the pipistrelle roosts were confirmed; and

- At Tree 1331.1 (assessed as having high potential for roosting bats), on 1st August 2022, a noctule is recorded 15 minutes after sunset. There are other trees in the near vicinity with high to moderate potential for roosting bats.

4.2.2 Foraging

Noctules forage widely in a range of habitats including out in the open, over trees and often associated with water. The Core Sustenance Zone (CSZ)[8] is 4km. The species was recorded regularly at all locations across the site. The mosaic of mature trees, watercourses, agricultural land and small woodlands present at the survey area is considered highly suitable for use by this species.

4.3 Serotine

4.3.1 Roosting

Serotine bats, a larger sized species, almost solely roost in buildings, in small cavities or crevices with high access points such as gables and are rarely found in trees. Hibernation sites include cavity walls, disused chimneys and occasionally caves.

The automated data shows a slight peak of activity at detector location 33, with increased activity in July (maximum passes per night – 8). These passes were recorded towards the middle of the night as are not

[8] "*the area around a communal bat roost which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost*" Collins, J (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd Edition). The Bat Conservation Trust. London

thought to indicate a roost in the very near vicinity.

4.3.2 Foraging

Serotine bats have a CSZ of 4km, and prefer to forage within pasture and parkland, at open woodland edge and tall hedgerows and will also visit gardens and suburban areas where they are found foraging at white streetlights.

Across the season, a single serotine bat pass was recorded along transect route 10 and once along transect route 11, none were recorded on transect route 9. Serotine bats were recorded at twelve of the sixteen detector locations during the activity survey, where they were detected, it was in low numbers and for the majority of nights no serotine bats were recorded. Having said this the hedgerows, woodland edge and small suburban areas across the site are suitable for serotine bats and they likely use these on occasion to forage and would certainly commute through the site.

4.4 Leisler's bat

4.4.1 Roosting

Leisler's bats roost in trees, bat boxes and buildings, using a variety of sites in summer and hibernate in tree holes, buildings and sometimes underground sites.

No evidence gathered during the presence/absence surveys for roosts or bat activity surveys suggest there is a Leisler's roost within the site or in a very close proximity to site.

4.4.2 Foraging

Leisler's bat has a CSZ of 3km and will forage widely at woodland edge, wood-lined roads, over pasture, waterbodies but generally avoiding improved grassland.

Only one confirmed Leisler's call was recorded at location 27, in the month of July 2022, during the automated activity survey. Further registrations may be included in the 'big bat' grouping however, considering numbers of confirmed noctule and serotine bats present this is predicted to only amount to very few further calls, with most belonging to noctule or secondly serotine bats. Leisler's were recorded on single occasions on both transect 9 and 10, they were not recorded on transect 11.

Leisler's bats were recorded in very low numbers across the survey season, it is thought likely they use the site as an occasional commuting route.

4.5 Barbastelle

4.5.1 Roosting

Barbastelle bats are a relatively elusive and rare medium sized bat found across the southern half of England and reaching into North Wales. Maternity roosts are almost exclusively found in trees, particularly oaks within ancient woodland and within parkland trees. Hibernation roosts can be found in trees and occasionally are found at underground sites, such as caves and tunnels.

No confirmed roosts were found during the 2022 or 2023 surveys. It is thought likely that barbastelles roost within or in the near vicinity of Site, based on the following evidence:

- During a dusk survey of Tree 1213 on 7th September 2022, a barbastelle was recorded 1 hour and 8 minutes after sunset;
- Tree 1213 is located in the north of site and is connected by treelines/hedge to locations 28 (c. 400m away), 31 (c. 700m away), 33 (c. 1km away).
- There was a significantly increased level of barbastelle activity in May and June at recording Locations 31 and 33. Particularly notable is the 12th May 2022 where 90 passes are recorded beginning 33 minutes after sunset;
- The automated survey also recorded higher than average activity (compared to other locations within the site) at Locations 31 – 33 in September; and
- There was increased activity at detector location 28 on the 9th October 2022.

4.5.2 Foraging

Barbastelle bats forage over/in riparian zones, unimproved grassland and field margins, but with a preference for broadleaved woodland and tend to wait for darkness to cross open areas, their CSZ is 6km.

During the automated activity survey, barbastelles were recorded at every recording location aside from location 18 and 19. Barbastelle passes were recorded most regularly, with the highest peaks in activity at locations 31 and 33. Both locations are situated within an area of mixed (mainly) broadleaved woodland, this is likely an important foraging resource for the species. However, other detectors (i.e.. location 26) which are situated within close proximity to ancient broadleaved woodland (c. 80m) did not detect significantly higher levels of activity.

During the transect surveys barbastelle bats were recorded on only 1 or 2 occasions per transect route, all were towards the middle of the night and not significantly close to sunrise or sunset.

Barbastelle bats are thought to forage throughout the site, utilising appropriate habitat (i.e., woodland) and would use the field margins and hedges with mature trees for commuting between foraging sites.

4.6 Myotis Species

4.6.1 Roosting

A Natterer's bat day-roost was discovered in Tree 1030 during the surveys in 2022. The automated detection survey and auto-ID process identified Daubenton's bat, Natterer's bat and a small number of whiskered bat passes during the survey period.

Daubenton's bat roosts are found in hollow trees, bridges or sometimes building generally close to water, hibernation sites are usually underground.

Natterer's bat roosts include tree holes, buildings, bridges and bat boxes, in winter they hibernate in cracks and crevices in caves and mines.

Whiskered bats can roost in both buildings and trees in summer and hibernate in underground sites.

During the automated activity survey Myotis species were recorded across all locations, reasonably regularly,

but on the majority of nights only accumulating to one or two passes. The auto-ID suggests presence of Natterer's bat at detector locations 20, 22, 24, 25, 27, 32 and 33, peaking at location 28 with 24 calls and addition manually assigned 'myotis species' calls (additional 33 potential passes), all recorded during May 2022. This could indicate a bat or a couple of bats roosting in the near vicinity during this month. The auto-ID identifies Daubenton's bats at each recording location. The highest number of calls are recorded at location 33, these are recorded across the recording period.

4.6.2 Foraging

Daubenton's bat primarily forages over water but is known to forage in woodland also. Daubenton's have a CSZ of 2km, Natterers bats use semi-natural woodland, tree lined river corridors and ponds and have a CSZ of 4km, Whiskered/Brandts bat tend to forage within mixed woodland and riparian vegetation and have a CSZ of 1km.

The results of this survey show a trend towards higher levels of Myotis activity in close proximity to waterbodies or areas of woodland. They were most regularly recorded at locations 18, 19, 20, 24, 25, 27, 31, 32 and 33 with the highest average number of calls were recorded at Locations 18, 19, 28 and 33. The mosaic of mature trees, watercourses, agricultural land and small woodlands present across the survey area is considered highly suitable for use by this species group.

4.7 Nathusius' Pipistrelle

4.7.1 Roosting

Nathusius' pipistrelle is a relatively large pipistrelle bat that roosts in buildings, hollows in trees, crevices in cliffs, walls and caves.

During the activity survey Nathusius' pipistrelle passes were recorded at the majority of locations across the site, however never in amounts great enough, or with sufficient regularity, to suggest a colony occurred nearby. However, the recording of 16 passes on one night at location 26 followed by 11 passes two nights later would indicate that a bat/small numbers of bats roosted relatively nearby in June 2022. At location 32, there was also a peak of activity on one night in July 2022 (17 passes), this may also indicate a roost. Given this species has been recorded using trees for roosting, it is possible a roost could have occurred within the survey area.

4.7.2 Foraging

This species foraging is associated with riparian habitats, broadleaved and mixed woodland, as well as parkland and has a CSZ of 3km.

During the monitoring period there were low numbers of Nathusius' pipistrelle passes recorded at most locations, accumulating to just one or two passes across the recording period. Location 21 and 25 recorded no activity by this species. This species has a call that is readily detected, and the low number of records is considered to reflect an absence of bats on the majority of recording nights.

The most notable results are at locations 26 and 32, maximum counts of 16 and 17 passes were recorded in one night. Location 26 is close by Manning Grove woodland and location 32 is a line of trees/ mixed broadleaved woodland, these are considered suitable for the species, however other locations near to highly suitable habitat i.e. 18 and 19 near to waterbodies recorded only a couple of isolated passes. On the transect surveys, 21 Nathusius' passes were recorded on the route of transect 9, in September 2022 all within a 3

minute period.

It is considered most likely that Nathusius' pipistrelle occasionally pass through the site, and in particular along routes adjacent to/passing waterbodies or areas of broadleaved woodland. Any such bats would be expected to stop to forage upon abundant sources of prey. The lack of regular evidence, or of peaks of higher activity suggests the area is not a well-used resource by the local population at the time of survey.

4.8 Brown long-eared bats

4.8.1 Roosting

Brown long-eared bats roost in trees, buildings and underground sites.

No conclusive evidence of a roost for this species has been discovered during the 2022 surveys, based upon tree inspections or inferred from activity survey data. However, it should be borne in mind that this species is particularly difficult to detect due to its quiet calls, and that the highest activity was recorded at location 22; trees in this hedgerow were not surveyed and a precautionary evaluation is therefore presented below.

Social calls for this species were recorded on three of the recording nights in July 2022 at location 27. These 'Type C' social calls are not fully understood, but theories include; bats keeping in touch when moving to different areas (e.g. switching foraging area during the night, roost switching or communicating foraging opportunities and/or agonistic in food patch defence scenarios, playing a role in mating behaviour or at roost locations they may help maintain group cohesion and bonding[9]. In Jon Russ (2021)[3] an example of this type of social call is provided recorded 'within a small maternity roost in a barn'.

It is therefore concluded that although there is no direct evidence, brown long eared bats could roost within the site, in trees or buildings and are most likely to roost in proximity to locations 22 and 27, compared to elsewhere within the site.

4.8.2 Foraging

This species foraging is strongly associated with tree cover it prefers woodland with a cluttered understorey but will also use hedgerows. It has a CSZ of 3km.

Although the data itself for brown long-eared bats may appear to show low levels of bat activity, this is likely not the case. Brown long-eared call characteristics are such that they are easily missed by detectors, however they are a widespread and common species. In reality, the species is likely to use the suitable habitats within the site readily.

Due to the difficulties in detecting this species, it is difficult to draw firm conclusions about the specific locations which may be of most value. It is considered highly likely that brown long-eared bats pass through the site, but are most likely to forage within the small woodlands, rather than hedgerows or open habitats that dominate the majority of the area.

[9] Neil Middleton, Andrew Froud & Keith French 2014 *Social Calls of the Bats of Britain and Ireland*

4.9 Bat Assemblage/Summary

Two species of bat and one species group are confirmed to roost at the survey area:

- Pipistrelle species;
- Soprano pipistrelle; and
- Natterer's bat.

At least a further eight species have been recorded at the site, and are considered therefore to roost within a relatively short distance (between 1km and 6km, depending on the CSZ of the species involved). Several of these species are known to roost in trees and therefore there is considered to be a greater likelihood of a roost being present within the survey area, currently or in future.

The activity survey has identified that activity levels vary across the site area, and this is summarised in Table 4-1~~Table 4-1~~ below. Broadly speaking, the south of the site is more well used by commoner species such as common and soprano pipistrelles and possibly brown long eared bats, Myotis were found in low numbers across the site, but remaining other species tended to be recorded in the north of the site.

Table 4-1
Summary of locations with greatest activity

Species	Location with highest average calls per night (highest mean passes per night)	Locations with bats occurring most regularly (highest median passes per night)
All combined	19	19
Noctule	33	32, 33
Serotine	33	All medians are 0, meaning for more than half of the recording night no passes were recorded.
Leisler's	27	27 (Just one night and pass)
'Big bats'	29, 31, 33	21, 24
Barbastelle	31, 33	31, 33
Myotis species	28	18, 19, 20, 24, 25, 27, 32, 33
Nathusius' pipistrelle	26, 32	All medians are 0, meaning for more than half of the recording night no passes were recorded.
Brown long eared	21, 22, 27	21, 22

FIGURE 1

Bat Survey Locations

607500

608000

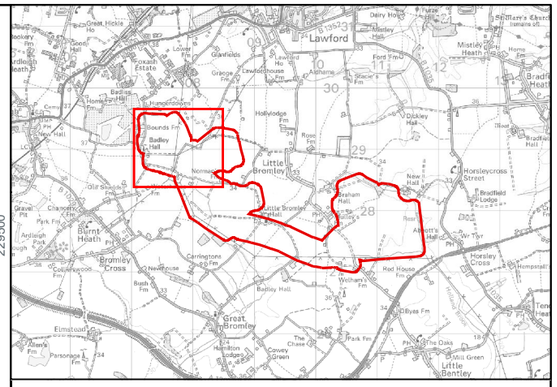
229500

229000

228500

N

0 250 500
Metres



LEGEND

- Survey Area
- Static Detector Location
- Transect Route
- Tree Subject to PRA and Presence/Absence Survey
- Tree Subject to Preliminary Roost Assessment (PRA) Only
- Tree Subject to Presence/Absence Survey Only
- Tree Not Surveyed (Access Refused)
- Tree Not Surveyed (No Impact Anticipated)

Woodland Assessment

- High
- Moderate
- Low
- Not Surveyed - Access Refused

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Bat Survey Locations

VER	DATE	REMARKS	Drawn	Checked
1	10/25/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 1

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

608000
608500
609000
229000
228500
N
0
250
500
Metres
Lawford
LEGEND
Survey Area
Static Detector Location
Transect Route
Tree Subject to PRA and Presence/Absence Survey
Tree Subject to Preliminary Roost Assessment (PRA) Only
Tree Subject to Presence/Absence Survey Only
Tree Not Surveyed (Access Refused)
Woodland Assessment
High
Low
Not Surveyed - Access Refused
Data Source:
© Crown copyright [and database rights] (2022) 0100031673 OS OpenData.
Aerial Imagery (2021):
Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community
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FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120
DRAWING TITLE:
Bat Survey Locations
VER	DATE	REMARKS	Drawn	Checked
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DRAWING NUMBER:
DRAWING 1
Page 2 of 6
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FIVE ESTUARIES
OFFSHORE WIND FARM
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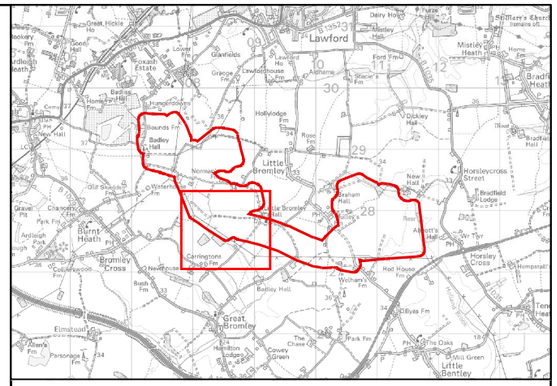


LEGEND

- Survey Area
- Static Detector Location
- Transect Route
- Exclusion Area
- Tree Subject to PRA and Presence/Absence Survey
- Tree Subject to Preliminary Roost Assessment (PRA) Only
- Tree Subject to Presence/Absence Survey Only
- Tree Not Surveyed (No Impact Anticipated)

Woodland Assessment

- High

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Bat Survey Locations

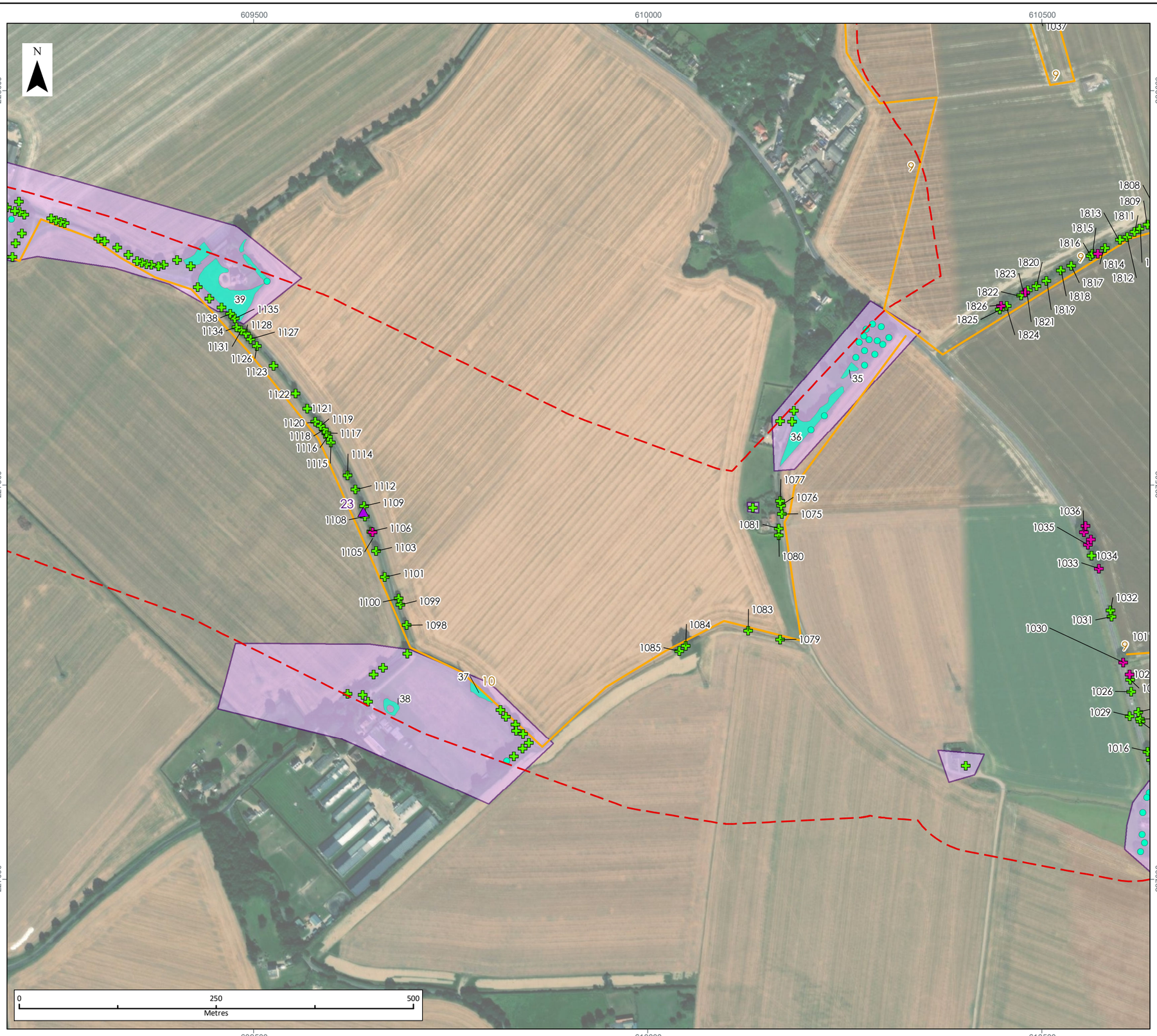
VER	DATE	REMARKS	Drawn	Checked
1	10/25/2023	For Issue	DB	JO

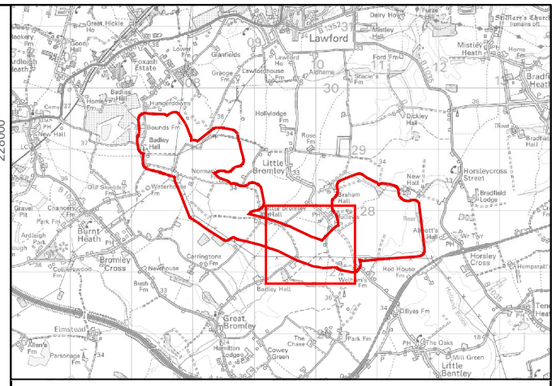
DRAWING NUMBER:

DRAWING 1

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM





LEGEND

- Survey Area
- Static Detector Location
- Transect Route
- Exclusion Area
- Tree Subject to PRA and Presence/Absence Survey
- Tree Subject to Preliminary Roost Assessment (PRA) Only
- Tree Not Surveyed (No Impact Anticipated)
- Not Surveyed - No Impact Anticipated

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Bat Survey Locations

VER	DATE	REMARKS	Drawn	Checked
1	10/25/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 1

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

610500 611000

229000 228500 228000

N

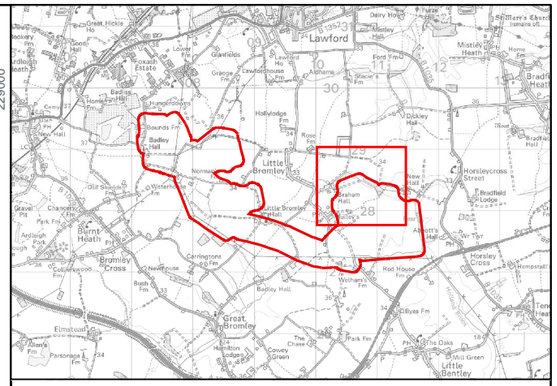
1019 1007 1013 1001 999 822 854 843 810 795 793 808 832 827 818 805 800 984 957 951.1 951 946 941 929 926 910 909 916 992 962 995 994 974 922 924 921 989 987 985 983 979 978 977 973 969 968 966 971 965 981 976 990 980 947 944.1 942 938 931 930.1 928 964 967 988 997 975 1053 1040 1038 1043 1039 1045 1037 1058 1805 1801 1802 1803 1808 1809 1811 1813 1815 1807 1804 1810 1806 1814

33 34 21 22 20 9

0 250 500
Metres

610500 611000

228000



LEGEND

- Survey Area
- Static Detector Location
- Transect Route
- Tree Subject to PRA and Presence/Absence Survey
- Tree Subject to Preliminary Roost Assessment (PRA) Only

Woodland Assessment

- High
- Low

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Bat Survey Locations

VER	DATE	REMARKS	Drawn	Checked
1	10/25/2023	For Issue	DB	JO

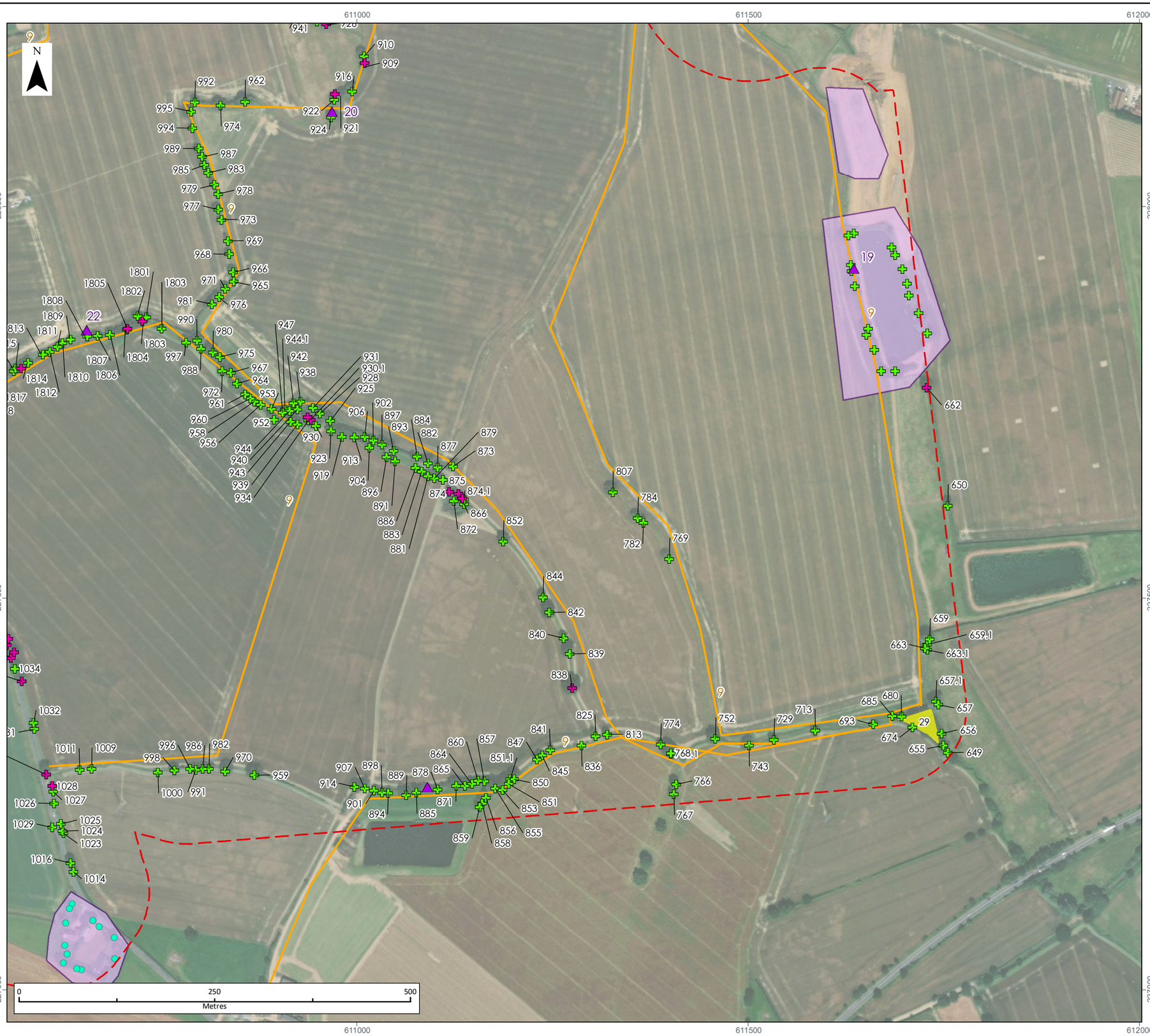
DRAWING NUMBER:

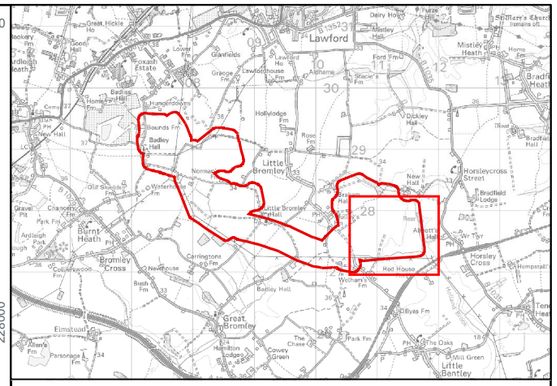
DRAWING 1

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

P:\05356 - GoBe Consultants Ltd\00010 Five Estuaries\Tech\GIS\Dwgs\Wking\2023 02 SLR Bat Survey Report\05356.00010.0214.1 Drawing 1 Bat Survey Locations.mxd





LEGEND

- Survey Area
- Static Detector Location
- Transect Route
- Exclusion Area
- Tree Subject to PRA and Presence/Absence Survey
- Tree Subject to Preliminary Roost Assessment (PRA) Only
- Tree Not Surveyed (No Impact Anticipated)

Woodland Assessment

- Negligible

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Bat Survey Locations

VER	DATE	REMARKS	Drawn	Checked
1	10/25/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 1

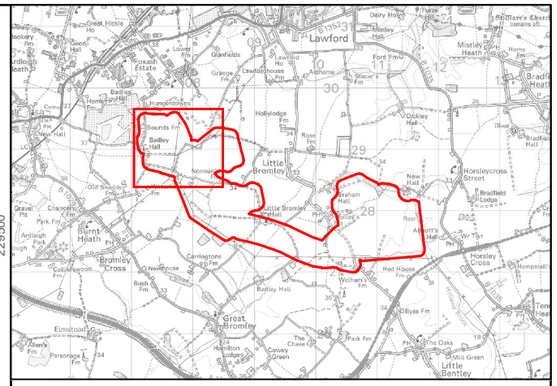
SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

P:\05356 - GoBe Consultants Ltd\00010 Five Estuaries\Tech\GIS\Dwgs\Wking\2023 02 SLR Bat Survey Report\05356.00010.0214.1 Drawing 1 Bat Survey Locations.mxd

FIGURE 2

Tree Roost Assessment Results



LEGEND

- Survey Area
- Observation Location

Tree with Bat Roost Potential
- High
- Moderate
- Low
- Negligible
- Not Surveyed - Access Refused

Tree with Bat Roost Potential
- High
- Moderate
- Low
- Negligible

Woodland Assessment
- High
- Moderate
- Low
- Not Surveyed - Access Refused

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

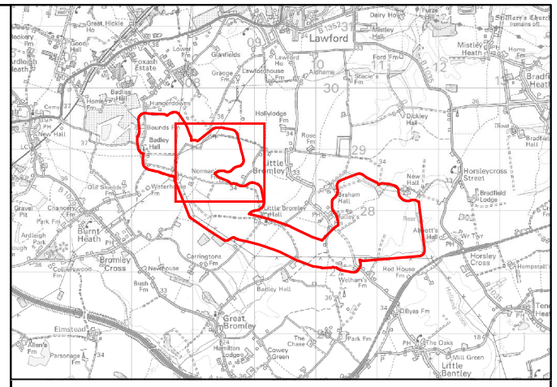
DRAWING NUMBER:

DRAWING 2
Page 1 of 6

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

P:\05356 - GoBe Consultants Ltd\00010 Five Estuaries\Tech\GIS\Dwgs\Wking\2023 02 SLR Bat Survey Report\05356.00010.0215.1 Drawing 2 Trees Roost Assessment Results.mxd



LEGEND

- Survey Area
- Observation Location

Tree with Bat Roost Potential

- High
- Moderate
- Low
- Negligible
- Not Surveyed - Access Refused

Woodland Assessment

- High
- Low
- Not Surveyed - Access Refused

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

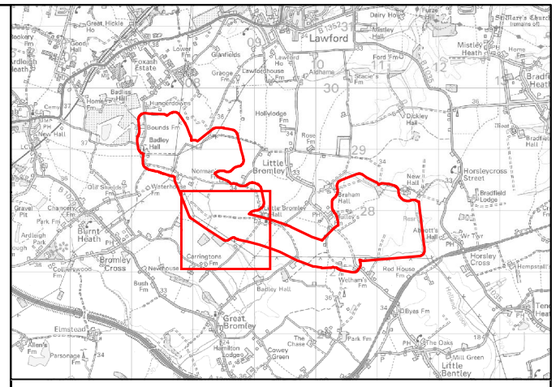
VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 2
Page 2 of 6

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM



LEGEND

- Survey Area
- Observation Location
- Exclusion Area

Tree with Bat Roost Potential

- Roost
- High
- Moderate
- Low
- Negligible
- Not Surveyed - Access Refused
- Not Surveyed - No Impact Anticipated

Woodland Assessment

- High

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

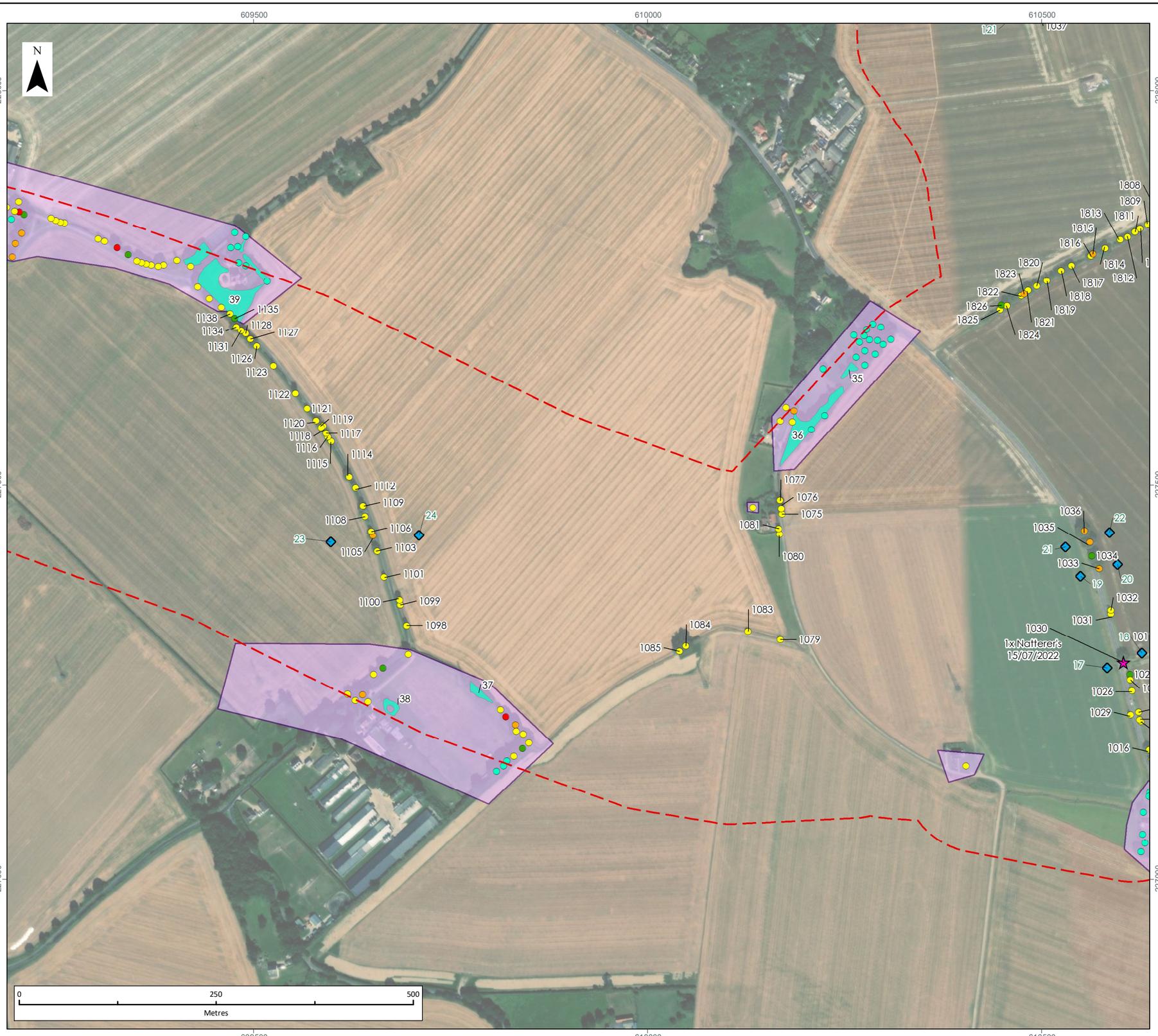
VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

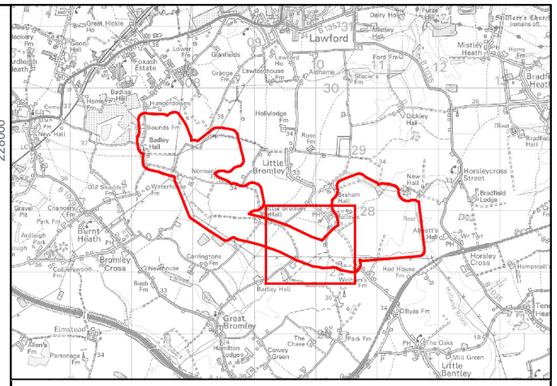
DRAWING NUMBER:

DRAWING 2
Page 3 of 6

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM





LEGEND

- Survey Area
- Observation Location
- Exclusion Area

Tree with Bat Roost Potential

- Roost
- High
- Moderate
- Low
- Negligible
- Not Surveyed - No Impact Anticipated

Not Surveyed - No Impact Anticipated

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 2

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
1:5,000	A3	OSGB 1936	British National Grid

FIVE ESTUARIES
OFFSHORE WIND FARM

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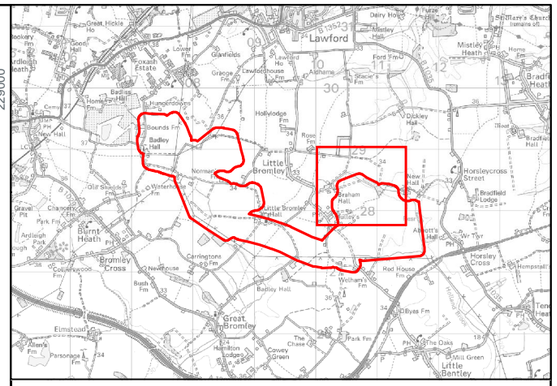

LEGEND

- Survey Area
- Observation Location

Tree with Bat Roost Potential

- High
- Moderate
- Low
- Negligible

Woodland Assessment

- High
- Low

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 2

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
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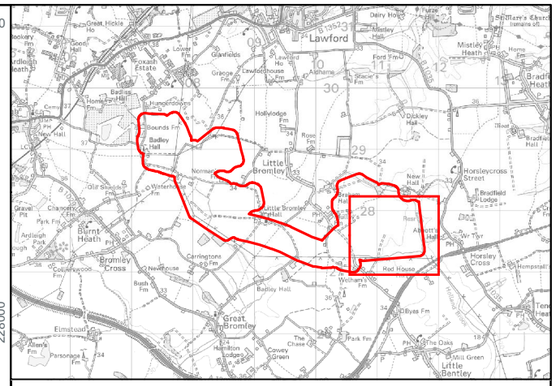
FIVE ESTUARIES
OFFSHORE WIND FARM



LEGEND

- Survey Area
- Observation Location
- Exclusion Area

Tree with Bat Roost Potential

- Roost
- High
- Moderate
- Low
- Negligible
- Not Surveyed - No Impact Anticipated

Woodland Assessment

- Negligible

PROJECT TITLE:

FIVE ESTUARIES OFFSHORE WINDFARM
BAT SURVEY NA120

DRAWING TITLE:

Trees Roost Assessment Results

VER	DATE	REMARKS	Drawn	Checked
1	10/26/2023	For Issue	DB	JO

DRAWING NUMBER:

DRAWING 2
Page 6 of 6

SCALE:	PLOT SIZE:	DATUM:	COORDINATE SYSTEM:
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FIVE ESTUARIES
OFFSHORE WIND FARM

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APPENDIX A

Preliminary Roost Assessment: raw data

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
649	611755	227303	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
650	611755	227618	16/06/2022	Hannah McBlain	Oak	1.5	12		Low	Within PEIR Boundary	Outside Exclusion Area
655	611749	227312	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
656	611747	227327	14/07/2022	Ellen Miller	Willow sp	1.4	14	Rot hole, Wood pecker hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
657	611743	227364	June/July 2022			0	0	Branch end cavity/cracks, Callus roll, Crack/split	Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
657.1	611740	227368	14/07/2022	Ellen Miller	Willow sp	0.9	12	Branch end cavity/cracks, Callus roll, Crack/split	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
659	611732	227447	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
659.1	611729	227441	14/07/2022	Ellen Miller	Willow sp	1.2	15	Branch end cavity/cracks, Wood pecker hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
661	611729	227838	June/July 2022			0	0		Negligible	Within PEIR Boundary	Inside Exclusion Area
662	611728	227769	16/06/2022	Amy Gill	Oak	1	14	Rot hole, Dense ivy, Unspecified (large tree)	High	Within PEIR Boundary	Outside Exclusion Area
663	611726	227436	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
663.1	611729	227434	14/07/2022	Ellen Miller	Willow sp	1	13	Branch end cavity/cracks, Crack/split, Rot hole	High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
669	611718	227864	16/06/2022	Amy Gill	Willow sp	1.5	16	Lifted bark, Unspecified (large tree)	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
674	611710	227335	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
676	611705	227886	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
677	611703	227902	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
679	611697	227920	16/06/2022	Amy Gill	Willow sp	0.1	5	Crack/split	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
680	611696	227349	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
683	611688	227790	16/06/2022	Amy Gill	Oak	2	18	Dense ivy, Unspecified (large tree)	High	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
684	611688	227938	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
685	611684	227350	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
686	611683	227948	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
690	611670	227790	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
692	611661	227817	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
693	611660	227339	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
696	611653	227844	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
696.1	611651	227836	16/06/2022	Amy Gill	Ash	0.1	6	Rot hole, Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
701	611636	227898	16/06/2022	Amy Gill	Alder	0.15	7		Low	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
702	611635	227966	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
705	611632	227917	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
706	611631	227925	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
707	611628	227963	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
713	611586	227331	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
729	611533	227319	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
743	611501	227312	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
752	611458	227320	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
766	611408	227262	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
767	611405	227250	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
768	611401	227302	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
768.1	611401	227301	16/06/2022	Hannah McBlain	Oak	2	12		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
769	611399	227550	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
774	611388	227313	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
782	611366	227596	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
784	611359	227602	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
793	611348	228337	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
795	611344	228342	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
800	611337	228329	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
805	611330	228315	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
807	611327	227635	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
808	611325	228331	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
810	611324	228357	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
813	611320	227326	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
818	611315	228320	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
822	611307	228376	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
825	611305	227324	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
827	611304	228320	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
832	611294	228321	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
836	611287	227312	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
838	611275	227385	16/06/2022	Emma Clarke	Oak	1.3	15	Helical split	Moderate	Within PEIR Boundary	Outside Exclusion Area
839	611272	227429	16/06/2022	Emma Clarke	Oak	0.8	12		Low	Within PEIR Boundary	Outside Exclusion Area
840	611264	227449	16/06/2022	Emma Clarke	Oak	0.55	10		Low	Within PEIR Boundary	Outside Exclusion Area
841	611247	227306	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
842	611246	227482	16/06/2022	Emma Clarke	Oak	1.5	14		Low	Within PEIR Boundary	Outside Exclusion Area
843	611245	228347	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
844	611238	227501	16/06/2022	Emma Clarke	Oak	0.4	8		Low	Within PEIR Boundary	Outside Exclusion Area
845	611237	227299	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
847	611230	227294	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
850	611201	227269	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
851	611194	227263	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
851.1	611196	227269	16/06/2022	Hannah McBlain	Oak	0.6	4.5		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
852	611187	227572	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
853	611186	227255	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
854	611180	228343	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
855	611177	227257	16/06/2022	Hannah McBlain	Oak	1.8	13		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
856	611165	227245	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
857	611163	227266	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
858	611160	227238	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
859	611157	227233	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
860	611155	227267	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
864	611147	227263	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
865	611138	227260	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
866	611137	227620	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
871	611127	227260	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
872	611124	227624	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
873	611123	227668	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
874	611118	227636	16/06/2022	Emma Clarke	Oak	1	11	Branch end cavity/cracks	Moderate	Within PEIR Boundary	Outside Exclusion Area
875	611110	227651	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
877	611103	227667	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
878	611103	227256	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
879	611099	227653	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
881	611091	227656	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
882	611091	227672	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
883	611083	227662	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
884	611077	227681	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
885	611076	227252	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
886	611075	227666	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
889	611063	227248	16/06/2022	Hannah McBlain	Oak	1.5	10		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
891	611049	227675	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
893	611047	227688	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
894	611040	227251	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
896	611038	227680	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
897	611032	227696	16/06/2022	Emma Clarke	Oak	0.45	7		Low	Within PEIR Boundary	Outside Exclusion Area
898	611032	227252	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
901	611022	227254	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
902	611021	227701	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
904	611016	227692	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
906	611010	227706	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
907	611010	227257	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
909	611009	228178	16/06/2022	Emma Clarke	Oak	1.6	8	Rot hole, Tear out	High	Within PEIR Boundary	Outside Exclusion Area
910	611009	228192	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
913	610997	227705	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
914	610997	227259	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
916	610994	228147	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
919	610981	227706	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
921	610979	228141	16/06/2022	Emma Clarke	Oak	2	8	Rot hole, Crack/split, Large hollow, Lifted bark	High	Within PEIR Boundary	Outside Exclusion Area
922	610971	228136	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
923	610967	227713	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
924	610967	228114	16/06/2022	Emma Clarke	Oak	0.6	9		Low	Within PEIR Boundary	Outside Exclusion Area
925	610966	227726	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
926	610961	228232	16/06/2022	Emma Clarke	Ash	0.6	12	Large hollow	Moderate	Within PEIR Boundary	Outside Exclusion Area
928	610953	227736	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
929	610949	228236	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
930	610948	227720	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
930.1	610941	227728	16/06/2022	Emma Clarke	Oak	0.5	10	Callus roll, Branch end cavity/cracks	Moderate	Within PEIR Boundary	Outside Exclusion Area
931	610944	227743	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
934	610938	227727	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
938	610928	227751	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
939	610924	227722	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
940	610924	227741	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
941	610921	228244	16/06/2022	Emma Clarke	Oak	1.3	10	Rot hole, Branch end cavity/cracks	Moderate	Within PEIR Boundary	Outside Exclusion Area
942	610919	227749	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
943	610915	227725	16/06/2022	Emma Clarke	Oak	0.45	12		Low	Within PEIR Boundary	Outside Exclusion Area
944	610914	227739	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
944.1	610908	227741	16/06/2022	Emma Clarke	Oak	0.6	10		Low	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
946	610910	228252	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
947	610905	227737	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
951	610896	228264	16/06/2022	Emma Clarke	Oak	0.5	8	Large hollow	High	Within PEIR Boundary	Outside Exclusion Area
951.1	610898	228265	16/06/2022	Emma Clarke	Oak	0.9	10	Rot hole, Tear out	Moderate	Within PEIR Boundary	Outside Exclusion Area
952	610894	227728	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
953	610891	227742	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
956	610877	227747	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
957	610876	228299	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
958	610869	227751	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
959	610869	227274	16/06/2022	Hannah McBlain	Ash	0.5	12		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
960	610864	227755	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
961	610857	227760	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
962	610857	228134	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
964	610847	227774	16/06/2022	Emma Clarke	Oak	0.55	8		Low	Within PEIR Boundary	Outside Exclusion Area
965	610843	227904	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
966	610842	227916	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
967	610839	227788	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
968	610837	227939	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
969	610835	227956	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
970	610832	227279	16/06/2022	Hannah McBlain	Oak	0.9	12		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
971	610832	227895	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
972	610828	227790	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
973	610827	227983	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
974	610826	228129	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
975	610825	227808	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
976	610824	227884	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
977	610823	227996	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
978	610823	228016	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
979	610818	228028	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
980	610816	227814	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
981	610815	227875	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
982	610811	227282	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
983	610810	228043	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
984	610806	228333	16/06/2022	Emma Clarke	Oak	0.85	11		Low	Within PEIR Boundary	Outside Exclusion Area
985	610805	228053	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
986	610803	227282	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
987	610802	228063	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
988	610801	227818	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
989	610798	228074	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
990	610796	227829	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
991	610794	227281	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
992	610793	228133	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
994	610790	228100	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
995	610788	228121	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
996	610787	227282	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
997	610782	227826	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
998	610767	227280	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
999	610757	228487	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1000	610746	227278	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1001	610736	228508	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1002	610691	227040	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1003	610690	227067	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1006	610671	227081	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1007	610668	228546	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1008	610663	227089	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1009	610661	227282	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1010	610648	227026	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1011	610646	227281	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1012	610642	227027	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1013	610641	228564	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1014	610638	227151	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1015	610636	227110	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1016	610634	227162	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1017	610633	227104	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1018	610630	227046	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1019	610630	228566	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1020	610628	227085	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1021	610627	227057	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1022	610625	227035	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1023	610625	227200	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1024	610624	227203	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1025	610622	227212	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1026	610613	227238	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1027	610612	227253	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1028	610611	227260	16/06/2022	Amy Gill	Ash	0.2	6	Wood pecker hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1029	610611	227207	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1030	610603	227275	16/06/2022	Amy Gill	Ash	0.5	8	Rot hole, Callus roll	High	Within PEIR Boundary	Outside Exclusion Area
1031	610588	227333	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1032	610587	227341	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1033	610572	227394	16/06/2022	Amy Gill	Ash	0.5	12	Callus roll, rot hole, tear out	High	Within PEIR Boundary	Outside Exclusion Area
1034	610563	227410	16/06/2022	Amy Gill	Oak	0.6	12		Low	Within PEIR Boundary	Outside Exclusion Area
1035	610558	227424	16/06/2022	Amy Gill	Oak	0.6	13	Callus roll, Crack/split, Unspecified (large tree)	Moderate	Within PEIR Boundary	Outside Exclusion Area
1036	610553	227440	16/06/2022	Amy Gill	Oak	0.6	13	Rot hole, Unspecified (large tree)	Moderate	Within PEIR Boundary	Outside Exclusion Area
1037	610495	228102	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1038	610494	228184	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1039	610484	228160	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1040	610483	228177	June/July 2022						Negligible	Within PEIR Boundary	Outside Exclusion Area
1041	610482	228117	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1042	610480	228108	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1043	610479	228172	10/08/2022	Hannah McBlain	Oak	2	10		Low	Within PEIR Boundary	Outside Exclusion Area
1044	610477	228121	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1045	610463	228112	10/08/2022	Hannah McBlain	Oak	1.5	15	Crack/split, Large hollow, Tear out	Moderate	Within PEIR Boundary	Outside Exclusion Area
1046	610407	228137	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1047	610403	227144	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1048	610379	228128	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1049	610356	228125	N/A						Not Surveyed - Within Woodland	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1050	610342	228127	N/A						Not Surveyed - Within Woodland	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1051	610333	228128	N/A						Not Surveyed - Within Woodland	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1052	610314	228132	N/A						Not Surveyed - Within Woodland	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1053	610314	228181	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1054	610306	227687	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1055	610298	227678	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1056	610296	227701	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1057	610291	227683	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1058	610290	228122	10/08/2022	Hannah McBlain	Oak	1.2	13	Branch end cavity/cracks, Tear out, Wood pecker hole	High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1059	610288	227666	N/A						Not Surveyed - Refused Access	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1060	610285	227704	N/A						Not Surveyed - Refused Access	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1061	610281	227684	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1062	610277	227697	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1063	610275	227652	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1064	610275	227670	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1065	610274	227689	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1066	610268	227681	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1067	610264	227662	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1069	610224	227588	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1071	610207	227570	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1072	610185	227594	16/06/2022	Emma Clarke	Oak	1.5	12	Rot hole, Lifted bark	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1073	610183	227580	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1075	610170	227463	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1076	610169	227474	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1077	610168	227480	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1078	610168	227581	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1079	610168	227304	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1080	610166	227436	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1081	610166	227445	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1082	610133	227471	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1083	610127	227315	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1084	610048	227296	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1085	610040	227289	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1086	609849	227173	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1087	609842	227184	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1088	609841	227166	16/06/2022	Emma Clarke	Oak	0.5	11		Low	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1089	609833	227188	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1090	609832	227196	16/06/2022	Emma Clarke	Oak	1.2	10	Rot hole, Branch end cavity/cracks	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1091	609830	227156	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1092	609821	227150	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1093	609820	227206	16/06/2022	Emma Clarke	Oak	1.2	11	Large hollow	High	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1095	609813	227215	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1097	609695	227286	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1098	609694	227322	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1099	609686	227348	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1100	609684	227356	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1101	609666	227383	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1102	609664	227268	16/06/2022	Emma Clarke	Oak	0.6	10		Low	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1103	609655	227416	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1104	609652	227260	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1105	609651	227432	16/06/2022	Emma Clarke	Oak	0.8	9	Rot hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1106	609649	227441	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1107	609645	227225	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1108	609641	227460	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1109	609640	227473	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1110	609638	227234	16/06/2022	Emma Clarke	Oak	1	13	Callus roll, Branch end cavity/cracks, Tear out	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1112	609629	227494	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1113	609619	227235	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1114	609619	227512	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1115	609598	227554	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1116	609594	227561	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1117	609592	227566	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1118	609589	227570	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1119	609585	227575	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1120	609578	227580	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1121	609568	227597	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1122	609553	227616	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1123	609525	227651	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1124	609517	227758	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1126	609504	227676	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1127	609496	227685	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1128	609490	227692	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1131	609484	227696	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1134	609478	227700	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1135	609476	227711	16/06/2022	Emma Clarke	Oak	0.6	12		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1138	609470	227717	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1139	609459	227725	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1140	609444	227736	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1141	609429	227751	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1142	609420	227777	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1143	609403	227785	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1144	609386	227779	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1145	609379	227777	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1146	609370	227779	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1147	609364	227780	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1148	609358	227782	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1149	609352	227784	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1150	609341	227792	16/06/2022	Emma Clarke	Oak	1.6	10		Low	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1151	609327	227801	16/06/2022	Emma Clarke	Oak	2	12	Rot hole, Large hollow	High	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1152	609311	227809	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1153	609303	227812	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1154	609260	227832	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1155	609255	227833	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1156	609249	227835	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1157	609243	227838	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1158	609209	227843	16/06/2022	Amy Gill	Sycamore	0.4	12		Low	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1158.1	609203	227846	16/06/2022	Amy Gill	Ash	0.5	9	Wood pecker hole	High	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1159	609206	227819	16/06/2022	Amy Gill	Tilia sp	0.7	12	Many small features, Unspecified (large tree)	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1160	609202	227859	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1161	609198	227806	16/06/2022	Amy Gill	Sycamore	0.4	9	Rot hole, Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1162	609197	227847	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1163	609194	227789	16/06/2022	Amy Gill	Yew	0.3	7	Rot hole, Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1164	609193	227837	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1165	609187	227852	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1166	609184	227789	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1167	609176	227835	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1168	609169	227858	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1169	609167	227799	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1170	609163	227792	16/06/2022	Amy Gill	Sycamore	0.75	14	Callus roll, Unspecified (large tree)	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1171	609161	227850	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1172	609156	227798	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1173	609153	227839	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1174	609151	227869	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1175	609146	227829	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1176	609142	227804	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1177	609140	228115	June 2023	Emily Drinkwater	Oak	1.6	11	Branch end cavity/cracks,Crack/split,Lifted bark,Rot hole	M	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1178	609139	227822	16/06/2022	Amy Gill	Ash	0.7	11	Callus roll, Wood pecker hole, Crack/split, Unspecified (large tree)	High	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1179	609128	227811	16/06/2022	Amy Gill	Pine	0.3	12	Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1179.1	609128	227811	16/06/2022	Amy Gill	Ash	0.3	9	Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1180	609113	227817	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1182	609097	227826	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1183	609097	228113	June 2023	Emily Drinkwater	Sycamore	0.45	5.5	none	N	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1185	609085	227831	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1186	609083	228266	June 2023	Emily Drinkwater	Horse chestnut	0.4	5	none	N	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1187	609080	227835	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1189	609069	227904	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Inside Exclusion Area
1190	609047	228387	13/07/2022	Ellen Miller	Oak	0.8	7	Branch end cavity/cracks, Crack/split, Rot hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1191	609044	228393	13/07/2022	Ellen Miller	Oak	0.6	3	Branch end cavity/cracks, Crack/split, Large hollow	High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1192	609043	228413	13/07/2022	Ellen Miller	Oak	0.6	4	Branch end cavity/cracks, Crack/split	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1195	608719	228851	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1196	608716	229196	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1197	608709	228197	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1198	608708	228218	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1199	608698	228194	15/06/2022	Amy Gill	Oak	0.7	9	Rot hole, Callus roll	Moderate	Within PEIR Boundary	Outside Exclusion Area
1200	608690	228282	15/06/2022	Amy Gill	Oak	0.5	8	Large hollow	High	Within PEIR Boundary	Outside Exclusion Area
1201	608687	228305	15/06/2022	Amy Gill	Oak	0.6	8	Rot hole, Callus roll, Wood pecker hole	High	Within PEIR Boundary	Outside Exclusion Area
1202	608685	228328	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1203	608682	228355	15/06/2022	Amy Gill	Oak	0.4	7	Rot hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1204	608682	228364	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1205	608682	228343	15/06/2022	Amy Gill	Oak	0.4	8	Callus roll, Crack/split	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1206	608681	228391	15/06/2022	Amy Gill	Oak	0.4	9	Rot hole, Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1207	608681	228380	15/06/2022	Amy Gill	Oak	0.45	8	Rot hole, Callus roll	High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1208	608678	228197	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1209	608655	228198	15/06/2022	Amy Gill	Oak	0.7	8	Rot hole, Callus roll, Crack/split	High	Within PEIR Boundary	Outside Exclusion Area
1210	608604	228206	15/06/2022	Amy Gill	Oak	0.5	7	Crack/split	High	Within PEIR Boundary	Outside Exclusion Area
1211	608597	228207	15/06/2022	Amy Gill	Oak	0.6	6	Rot hole, Crack/split	High	Within PEIR Boundary	Outside Exclusion Area
1212	608570	228200	15/06/2022	Amy Gill	Oak	0.8	7	Rot hole, Lifted bark, Unspecified (large tree)	High	Within PEIR Boundary	Outside Exclusion Area
1213	608563	228957	15/06/2022	Emma Clarke	Oak	0.6	8	Large hollow	Moderate	Within PEIR Boundary	Outside Exclusion Area
1214	608548	228200	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1215	608530	228199	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1224	608478	228197	15/06/2022	Amy Gill	Oak	0.45	7		Low	Within PEIR Boundary	Outside Exclusion Area
1225	608477	229249	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1227	608462	228194	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1230	608440	228473	15/06/2022	Amy Gill	Sycamore	0.3	11	Rot hole, Callus roll	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1231	608436	228492	June 2023						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1233	608436	229255	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1236	608431	229246	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1237	608428	229254	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1238	608423	228477	15/06/2022	Amy Gill	Apple	0.15	2.5		Low	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1240	608417	228492	June 2023						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1241	608417	229254	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1242	608413	229241	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1243	608411	229253	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1246	608405	228819	15/06/2022	Emma Clarke	Oak	0.6	10		Low	Within PEIR Boundary	Outside Exclusion Area
1247	608401	229251	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1251	608394	229251	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1254	608383	229250	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1255	608381	228164	15/06/2022	Amy Gill	Oak	0.8	7	Large hollow	Moderate	Within PEIR Boundary	Outside Exclusion Area
1257	608373	229238	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1259	608368	229238	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1261	608365	229246	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1262	608360	229241	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1263	608353	228161	15/06/2022	Amy Gill	Oak	0.6	8		Low	Within PEIR Boundary	Outside Exclusion Area
1264	608347	229236	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1266	608345	229242	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1267	608339	228159	15/06/2022	Amy Gill	Oak	0.4	7		Low	Within PEIR Boundary	Outside Exclusion Area
1268	608336	229247	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1270	608331	229235	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1272	608323	229237	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1275	608319	229244	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1276	608314	229234	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1280	608304	229233	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1282	608294	229236	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1284	608286	228155	15/06/2022	Amy Gill	Oak	0.5	6	Dense ivy	Moderate	Within PEIR Boundary	Outside Exclusion Area
1285	608284	229233	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1289	608271	228150	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1291	608267	228283	15/06/2022	Amy Gill	Oak	0.5	7	Dense ivy	Moderate	Within PEIR Boundary	Outside Exclusion Area
1292	608266	228248	15/06/2022	Amy Gill	Oak	0.7	7	Many small features	Moderate	Within PEIR Boundary	Outside Exclusion Area
1294	608266	228766	15/06/2022	Emma Clarke	Oak	1.3	10	Crack/split, Large hollow	High	Within PEIR Boundary	Outside Exclusion Area
1295	608265	228213	15/06/2022	Amy Gill	Oak	0.3	5		Low	Within PEIR Boundary	Outside Exclusion Area
1297	608261	228138	03/08/2022	Amy Gill	Silver birch	1.2	9		Low	Within PEIR Boundary	Outside Exclusion Area
1297.1	608267	228141	N/A	Emma Clarke	silver birch				Low	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1299	608259	228179	15/06/2022	Amy Gill	Oak	0.75	10	Large hollow, Unspecified (large tree)	Moderate	Within PEIR Boundary	Outside Exclusion Area
1300	608257	228113	03/08/2022	Amy Gill	Oak	0.6	7		Low	Within PEIR Boundary	Outside Exclusion Area
1301	608256	229216	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1302	608255	228173	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1303	608253	228161	15/06/2022	Amy Gill	Oak	0.4	7	Rot hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1303.1	608244	228148	03/08/2022	Amy Gill	Oak	1.5	8	Branch end cavity/cracks, Callus roll, Rot hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1307	608241	228081	N/A						Not Surveyed - Within Woodland	Within PEIR Boundary	Outside Exclusion Area
1307.1	608235	228091	03/08/2022	Amy Gill	Oak	1.3	7	Callus roll, Crack/split, Many small features	Moderate	Within PEIR Boundary	Outside Exclusion Area
1307.2	608236	228100	15/06/2022	Emma Clarke	oak				Low	Within PEIR Boundary	Outside Exclusion Area
1307.3	608238	228109	03/08/2022	Amy Gill	Oak	1.7	11	Callus roll, Crack/split, Unspecified (large tree)	High	Within PEIR Boundary	Outside Exclusion Area
1307.4	608244	228110	03/08/2022	Amy Gill	Oak	1.5	9	Callus roll	Moderate	Within PEIR Boundary	Outside Exclusion Area
1307.5	608253	228115	15/06/2022	Emily Drinkwater	Oak				Low	Within PEIR Boundary	Outside Exclusion Area
1307.6	608260	228124	15/06/2022	Emily Drinkwaoakter	Oak				Negligible	Within PEIR Boundary	Outside Exclusion Area
1308	608239	229208	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1310	608235	228099	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1316	608225	228079	15/06/2022	Emma Clarke	Oak	0.8	12	Callus roll, Crack/split	Moderate	Within PEIR Boundary	Outside Exclusion Area
1318	608224	229199	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1320	608221	229196	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1322	608219	227771	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1325	608216	228748	15/06/2022	Emma Clarke	Oak	0.45	7	Callus roll, Tear out	Moderate	Within PEIR Boundary	Outside Exclusion Area
1330	608205	228077	15/06/2022	Emma Clarke	Oak	0.6	8	Rot hole, Crack/split	Moderate	Within PEIR Boundary	Outside Exclusion Area
1331	608204	228746	15/06/2022	Emma Clarke	Oak	0.65	7	Rot hole, Large hollow	High	Within PEIR Boundary	Outside Exclusion Area
1331.1	608207	228748	15/06/2022	Emma Clarke	Oak	1.2	9	Rot hole, Large hollow	High	Within PEIR Boundary	Outside Exclusion Area
1332	608201	228056	15/06/2022	Emma Clarke	Oak	0.7	10	Rot hole, Callus roll, Branch end cavity/cracks	Moderate	Within PEIR Boundary	Outside Exclusion Area
1333	608193	228038	15/06/2022	Emma Clarke	Oak	1.5	11	Rot hole, Dense ivy, Unspecified (large tree)	Moderate	Within PEIR Boundary	Outside Exclusion Area
1337	608186	228028	15/06/2022	Emma Clarke	Oak	0.9	10	Rot hole, Tear out	Moderate	Within PEIR Boundary	Outside Exclusion Area
1338	608186	229163	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1339	608184	229160	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1341	608178	229157	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1343	608150	228981	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1344	608148	228997	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1347	608138	228516	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1348	608137	228729	15/06/2022	Emma Clarke	Oak	0.5	10		Low	Within PEIR Boundary	Outside Exclusion Area
1351	608130	229076	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1352	608128	228014	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1353	608127	228521	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1354	608123	229060	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1355	608118	229043	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1357	608114	229010	15/06/2022	Emma Clarke	Oak	1	6	Rot hole, Crack/split, Large hollow	Moderate	Within PEIR Boundary	Outside Exclusion Area
1358	608110	229025	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1360	608097	228034	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1367	608071	227825	16/06/2022	Amy Gill	Willow sp	0.7	12		High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1368	608071	227814	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1371	608062	229029	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1372	608058	229040	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1373	608051	227839	16/06/2022	Amy Gill	Oak	0.6	10	Rot hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1380	608030	228097	15/06/2022	Emma Clarke	Aspen	0.28	6		Low	Within PEIR Boundary	Outside Exclusion Area
1386	608020	228114	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1392	608003	229052	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1393	608003	228129	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1400	607991	228142	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1407	607980	229060	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1410	607970	228154	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1412	607965	229064	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1413	607961	228157	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1415	607957	229067	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1420	607950	228163	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1426	607936	229074	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1431	607927	229079	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1432	607927	228170	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1439	607917	229090	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1447	607898	228189	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1457	607876	228216	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1458	607866	228228	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1459	607862	228237	15/06/2022	Emma Clarke	Oak	0.7	6		Low	Within PEIR Boundary	Outside Exclusion Area
1461	607859	229073	15/06/2022	Emma Clarke	Oak	0.45	9	Rot hole, Callus roll, Crack/split	High	Within PEIR Boundary	Outside Exclusion Area
1462	607859	228254	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1464	607855	229063	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1465	607855	228262	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1466	607846	229065	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1469	607830	228300	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1470	607826	229033	15/06/2022	Emma Clarke	Oak	0.8	9		Low	Within PEIR Boundary	Outside Exclusion Area
1475	607816	228308	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1477	607810	228581	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1479	607808	228312	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1480	607805	228999	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1482	607798	228987	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1483	607797	228590	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1484	607797	228319	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1490	607787	228972	15/06/2022	Emma Clarke	Oak	0.6	11	Callus roll, Branch end cavity/cracks, Lifted bark	Moderate	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1490.1	607786	228970	15/06/2022	Emma Clarke	Oak	0.35	9		Low	Within PEIR Boundary	Outside Exclusion Area
1495	607779	228332	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1496	607778	228952	15/06/2022	Emma Clarke	Oak	1	11	Rot hole, Branch end cavity/cracks, Crack/split	Moderate	Within PEIR Boundary	Outside Exclusion Area
1499	607767	228934	15/06/2022	Emma Clarke	Oak	0.6	11	Rot hole, Branch end cavity/cracks, Lifted bark	Moderate	Within PEIR Boundary	Outside Exclusion Area
1504	607755	228909	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1506	607735	228868	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1508	607732	228860	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1509	607730	228438	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1511	607726	228851	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1513	607711	228810	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1522	607663	228916	13/07/2022	Ellen Miller	Oak	0.6	7	Crack/split, Lifted bark	Moderate	Within PEIR Boundary	Outside Exclusion Area
1530	607626	228677	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1531	607620	228920	13/07/2022	Ellen Miller	Oak	0.3	7		Negligible	Within PEIR Boundary	Outside Exclusion Area
1536	607602	228685	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1538	607597	228920	13/07/2022	Ellen Miller	Oak	0.6	7		Negligible	Within PEIR Boundary	Outside Exclusion Area
1538.1	607599	228922	13/07/2022	Ellen Miller	Oak	0.4	7		Negligible	Within PEIR Boundary	Outside Exclusion Area
1546	607558	228921	13/07/2022	Ellen Miller	Oak	0.7	7		Negligible	Within PEIR Boundary	Outside Exclusion Area
1548	607541	228921	13/07/2022	Ellen Miller	Holly	0.7	5	Lifted bark, rot hole	Moderate	Within PEIR Boundary	Outside Exclusion Area
1549	607537	228705	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1554	607488	228920	13/07/2022	Ellen Miller	Oak	0.5	6		Low	Within PEIR Boundary	Outside Exclusion Area
1556	607481	229487	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1558	607471	228920	13/07/2022	Ellen Miller	Oak	0.8	8	Branch end cavity/cracks,	High	Within PEIR Boundary	Outside Exclusion Area
1560	607468	228729	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1561	607500	229503	15/06/2022	Amy Gill	Tilia sp	0.3	6	Rot hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1561.1	607502	229495	15/06/2022	Amy Gill	Tilia sp	0.25	6	Callus roll, Rot hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1561.2	607504	229494	15/06/2022	Amy Gill	Tilia sp	0.25	4	Rot hole	Moderate	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1561.3	607505	229493	15/06/2022	Amy Gill	Tilia sp	0.25	3.5	Rot hole, Wood pecker hole	High	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1562	607466	228921	13/07/2022	Ellen Miller	Oak	0.2	5		Low	Within PEIR Boundary	Outside Exclusion Area
1565	607459	228731	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1568	607453	228733	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1572	607447	228736	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1573	607446	228923	13/07/2022	Ellen Miller	Oak	0.7	8		Low	Within PEIR Boundary	Outside Exclusion Area
1573.1	607451	228922	13/07/2022	Ellen Miller	Oak	0.3	7		Low	Within PEIR Boundary	Outside Exclusion Area
1574	607440	228736	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1575	607437	228923	13/07/2022	Ellen Miller	Oak	0.7	8	Branch end cavity/cracks, Lifted	Moderate	Within PEIR Boundary	Outside Exclusion Area
1575.1	607432	228923	13/07/2022	Ellen Miller	Oak	0.1	4		Low	Within PEIR Boundary	Outside Exclusion Area
1577	607429	228738	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1585	607409	228743	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1591	607394	228745	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1594	607387	228749	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1598	607374	228751	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1599	607363	228755	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1601	607351	228757	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1602	607331	228762	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1603	607327	228765	June/July 2022			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1604	607327	229484	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1608	607273	229031	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1609	607261	229033	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1612	607249	228737	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1613	607244	229034	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1614	607242	228728	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1615	607241	228769	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1616	607237	228722	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1617	607233	228711	June/July 2022			0	0		Negligible	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1618	607233	229031	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1620	607230	228883	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1622	607225	229267	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1623	607225	229030	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1626	607223	229322	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1628	607222	228923	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1630	607221	229354	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1632	607220	229259	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1634	607218	229585	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1635	607217	229550	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1638	607216	229569	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1640	607215	229295	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1641	607214	229323	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1642	607213	229366	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1643	607212	229305	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1644	607212	229030	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1645	607211	229583	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1646	607211	229019	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1647	607210	229373	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1648	607208	229248	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1649	607208	228924	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1650	607207	229356	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1651	607207	229236	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1652	607206	229207	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1653	607204	229364	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1654	607204	229028	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1655	607203	229435	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1656	607201	229314	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1658	607199	229449	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1659	607199	229338	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1660	607197	229513	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1661	607197	229429	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1662	607197	229187	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1663	607196	229352	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1664	607195	229438	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1665	607192	229172	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1666	607191	229578	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1667	607190	228987	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1668	607190	229014	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1669	607188	228951	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1670	607186	229022	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1671	607184	229046	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1672	607184	229032	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1673	607181	229344	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1674	607181	228980	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1675	607180	229086	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1676	607179	229051	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1677	607179	229100	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1678	607178	229004	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1679	607177	229038	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1680	607176	229134	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1681	607175	229155	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1682	607173	229042	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1683	607173	229032	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1684	607172	229119	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1685	607172	229082	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1686	607171	229036	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1687	607171	229017	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1688	607170	229146	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1689	607169	229140	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1690	607168	229027	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1691	607168	229077	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1692	607167	229052	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1693	607166	229044	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1694	607166	229093	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1695	607165	229020	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1696	607164	229128	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1697	607163	229346	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1698	607163	228999	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1699	607162	229017	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1700	607161	229338	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1701	607161	229030	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1702	607160	228976	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1703	607160	229079	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1704	607159	229120	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1705	607159	229094	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1706	607159	229048	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1707	607156	229036	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1708	607154	229000	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1710	607153	229082	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1711	607150	229057	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1712	607149	229017	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1713	607147	229097	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1714	607146	229390	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1715	607145	229481	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1716	607145	229396	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1717	607145	229069	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1718	607144	229383	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1719	607144	229091	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1720	607143	229087	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1721	607143	228968	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1722	607141	229492	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1723	607140	229372	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1724	607139	229405	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1725	607139	228972	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1726	607139	228992	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1727	607139	229012	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1728	607138	229068	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1729	607137	229478	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1730	607137	229002	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1731	607136	229395	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1732	607135	228965	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1733	607134	229498	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1734	607134	228974	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1735	607132	229484	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1736	607132	229475	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1737	607130	229490	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1738	607130	229372	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1739	607127	228981	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1740	607127	229026	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1741	607127	229014	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1742	607126	228996	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1743	607125	228989	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1745	607124	229396	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1746	607122	229459	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1747	607121	229463	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1748	607121	229454	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1749	607121	229047	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1750	607119	229478	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1751	607119	229491	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1752	607119	229448	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1753	607119	229417	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1754	607119	229067	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1755	607117	229038	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1756	607117	229027	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1757	607116	229075	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1759	607113	229482	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1760	607111	229489	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1761	607110	229050	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1763	607103	229078	N/A						Not Surveyed	Outside PEIR Boundary and Within Survey Buffer	Outside Exclusion Area
1800	610751	227844	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1801	610731	227859	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1802	610720	227860	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1803	610713	227852	June 2023	Emma Clarke	Willow sp	0.27	5	Crack/split	M	Within PEIR Boundary	Outside Exclusion Area
1804	610706	227843	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1805	610695	227842	June 2023	Emily Drinkwater	Oak	0.9	11	Crack/split,transverse snap	M	Within PEIR Boundary	Outside Exclusion Area
1806	610684	227836	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1807	610669	227834	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1808	610656	227834	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area

Tree No.	X	Y	PRA date	PRA Lead Surveyor	Tree Species	Diameter (m)	Height (m)	PRF types present	PRA Category	Location	Exclusion
1809	610634	227830	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1810	610624	227825	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1811	610617	227821	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1812	610608	227814	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1813	610599	227811	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1814	610580	227800	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1815	610570	227794	June 2023	Emma Clarke	Oak	0.8	10	Lifted bark,Tear out	M	Within PEIR Boundary	Outside Exclusion Area
1816	610562	227790	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1817	610537	227778	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1818	610524	227772	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1819	610506	227759	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1820	610493	227752	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1821	610482	227747	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1822	610455	227727	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1823	610459	227736	June 2023	Emma Clarke	Willow sp	0.7	9.5	Crack/split,Rot hole	M	Within PEIR Boundary	Outside Exclusion Area
1824	610474	227740	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1825	610446	227722	June 2023			0	0		Negligible	Within PEIR Boundary	Outside Exclusion Area
1826	610436	227716	June 2023	Emily Drinkwater	Oak	0.4	7.5	Rot hole	M	Within PEIR Boundary	Outside Exclusion Area

APPENDIX B

Potential Roost Feature Assessment at moderate and high potential trees: raw data

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
838	Emma Clarke	Oak	1	Crack/split	7, NE, B	Long 3.5cm crack/split in branch	5x8cm wide cavity travels in towards trunk for 10cm room for a couple of bats, no suitable cavity the other end of the split	M	M	yes
839	Emma Clarke	Oak	2	Crack/split	10, S, B	3x3cm entrance	Crack/split branch, cavity travels in 6cm sheltered	L	M	yes
840	Emma Clarke	Oak	3	Tear out	9, S, B	8x6cm entrance	5cm deep cavity sheltered from above enough room for a couple of bats	M	M	yes
841	Emma Clarke	Oak	4	Branch end cavity/cracks	6, W, B	2cm wide	2cm wide crack in previously pruned branch, travels in towards trunk 5cm.	L	M	yes
874	Emma Clarke	Oak	1	Tear out	3.5, SW, B	5x2cm entrance	7 cm wide cavity inside, travelling horizontally down branch for 12cm	M	M	yes
874	Emma Clarke	Oak	2	Rot hole	2, NW, T	8x12cm entrance	Cavity at base of crown, large and only going in horizontally, too open to provide proper shelter for bats	L	M	yes
874	Emma Clarke	Oak	3	Rot hole	2, NE, T	22x12cm entrance	It goes upwards no more than 10cm then goes downwards and horizontal into a bowl for longer than the endoscope.	M	M	yes
909	Emma Clarke	Oak	1	Rot hole	3,W,B	10x5cm entrance, downward extension then trending upwards 35cm	Upward facing knot hole	M	H	yes
909	Emma Clarke	Oak	2	Rot hole	3, N, T	15x8cm entrance, 30cm cavity back and up slightly	wide and open	M	H	yes
909	Emma Clarke	Oak	3	Tear out	2.5, N, T	25x25cm entrance going back horizonally for 80cm	Large cavity,trending upwards up opening out into the previous recorded feature, allowing some light in, the feature goes down beyond the length of endoscope, hollow trunk.	H	H	no
921	Emma Clarke	Oak	1	Large hollow	3.5, T	Complex	Massive hollow, the whole trunk is a cavity, very open for the most part, on the north side there is an upward cavity, 40x3cm trending upwards for 50cm into branch, good features, lots of bats would fit. Many other small cavities around the dead wood with room for single bats. Also deep fissures trending downwards into the trunk shelter by wood above.	H	H	yes
921	Emma Clarke	Oak	2	Callus Roll	3, S, B		Callus at dead branch elbow, open at the top, no shelter	N	H	yes
921	Emma Clarke	Oak	3	Rot hole	3.5, E, B	13x4cm entrance, extends for 50cm and its 20cm wide throughout	Goes down initially then trends upwards through the branch	H	H	yes
926	Emily Drinkwater	Ash	1	Rot hole	6m,nw,t	2by2cm opening, but doesn't go further than 2cm inwards	Not suitable	N	M	yes
926	Emily Drinkwater	Ash	2	Rot hole	5m,ne,b	3cmby3cm, depth 2cm superficial no cavity	Not suitable	N	M	yes
926	Emily Drinkwater	Ash	3	Butt rot	0-1m,nesw,	Large basal cavity with lots of entry points and smaller cavities, some connecting, on the west facing side the bottom cavity is large and extends inside in various areas upwards, sideways, approximately 20-50cm,no numerous points of entry ranging from 3-10cm, same again on the NW but with smaller entrance holes, east side has a large cavity also, large space inside. The feature is low down though so not marked as high, more likely for small mammals not of the flying variety but with potential for opportunistic bats	Room for up to 3 bats	M	M	yes
930.1	Emily Drinkwater	Oak	1	Crack/split,Rot hole	5.5,s,b	Entrance 3x4cm, goes back about 6cm towards the trunk, 3-4cm wide. Doesn't go up towards the branch.	Room for 1 bat.	M	H	yes
930.1	Emily Drinkwater	Oak	2	Crack/split,Rot hole	6.2,s,b	Split in branch, 1cm superficial, not suitable		N	H	yes
930.1	Emily Drinkwater	Oak	3	Tear out	6, SW, T	2x5cm entrance at base	Old tear out location/ callus wound small entrance at base with cavity extending behind heartwood at least 35cm openihg out to cavity at top of feature. Sheltered and dark	H	H	yes
930.1	Emily Drinkwater	Oak	4	Crack/split,Rot hole	10.5,sw,b	On the east side of the tree but feature facing sw. On top of branch. Superficial cracks/rot hole, superficial 3cm depth.		N	H	yes

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
930.1	Emily Drinkwater	Oak	5	Branch end cavity/cracks,Rot hole	10.2,S,b	Entrance 3x4cm, depth of 4cm, too shallow/exposed. Feature on east side of tree but facing S.		N	H	yes
930.1	Emily Drinkwater	Oak	6	Rot hole,Tear out	8.5,s,b	Superficial dpeth of 1cm		N	H	yes
941	Emma Clarke	Oak	1	Crack/split	4.5, W, B	3x20cm crack	Crack with inward extension very narrow, room for a couple of bats	M	H	yes
941	Emma Clarke	Oak	2	Rot hole,Tear out	4, NE, B	4x2cm entrance, 25cm cavity	Hole at edge of old tear out getween healing bark/deadwood, good horizonal cavity	M	H	yes
941	Emma Clarke	Oak	3	Rot hole	4.5, E, T	3x2.5cm opening, extending back 70cm	Cavity extending from small opening	H	H	yes
941	Emma Clarke	Oak	4	Large hollow	4, N, T	20x15cm opening top entance, 40 x 30cm bottom entrance.	Bowl shaped and extending down and across 0.5m sheltered on one side at top for multiple bats, continuing down it meets another large hollow feature, larger opening 40x30cm, many owl pellets inside. Again room for bats at top of feature if owls not present, extending up beyond entrance 20cm	H	H	yes
951	Emma Clarke	Oak	1	Large hollow	1, N, T	complex	Three entrances, connected. One on ground level, second 0.5 up tree, with heartwood at bottom, opening 25x12cm, piece of heartwood in middle, cavity both sides/behind, cavity travels up to smaller opening 15x3cm and up into large hollow 50cm up. No bats but very good feature. Maternity potential	H	H	yes
951.1	Emily Drinkwater	Oak	1	Rot hole	6m,nw,b	10x10cm opening, but doesn't go anywhere also downwards facing	Not suitable	N	H	yes
951.1	Emily Drinkwater	Oak	2	Rot hole	2.5m,w,t	6cm round opening, 8cm horizontally, goes down 10cm, upwards 6cm upwards and quite wide, goes either side of the hole.	Room for >3bats	H	H	yes
951.1	Emily Drinkwater	Oak	3	Large hollow	1.2, sw,t	25by15cm, large opening/bowl shape inside but goes up 20 and left 40cm, right 20cm, lots of nooks and crannies.	Room for >3bats	H	H	yes
1028	Emma Clarke	Ash	1	Wood pecker hole	5, W, T	2x2cm entrance, extends 3cm into tree	Woodpecker pilot hole	L	L	yes
1030	Emily Drinkwater	Ash	1	Rot hole	4m,S,b	5cmby3cm opening, in and slightly upwards 6cm, kinks round and goes up but its difficult to say how much.	Room for up to 3 bats. Confirmed roost, Natterer's bat in situ	Roost	Roost	yes
1030	Emily Drinkwater	Ash	2	Rot hole	3.5m,sw,b	3by3cm superficial doesn't go in more than 2cm	Not suitable	N	Roost	yes
1030	Emily Drinkwater	Ash	3	Rot hole	4.5m,sw,b	3cm round opening, 4cm depth, 3cm up, 10cm.	Room for 1 bat	M	Roost	yes
1030	Emily Drinkwater	Ash	4	Rot hole	4.5m,sw,b	4by4cm round opening, doesn't go anywhere, no cavity, a few cm deep.	Not suitable	N	Roost	yes
1030	Emily Drinkwater	Ash	5	Rot hole	4.2m,a,b	5by3cm tear out at the end of a branch, no cavity, superficial, only 3cm depth.	Not suitable	N	Roost	yes
1030	Emily Drinkwater	Ash	6	Rot hole	6.5m,e	Linear rot hole with callus, 60cm long and 4cm wide opening/feature, 4cm depth, deep callus roll, 20cm downwards, doesn't go down.	Room for up to 3 bats	M	Roost	yes
1030	Emily Drinkwater	Ash	7	Rot hole	5.5m,n,b	2by1cm slot opening, 4cm deep.	Superficial, open, not suitable	N	Roost	yes
1030	Emily Drinkwater	Ash	8	Dense ivy	1.5m,s,b	50cm by 50cm section of thick ivy, lattice roots, dark above, it does sit quite far from the tree but has potential for one opportunistic bat	Room for 1 bat	M	Roost	yes
1033	Emily Drinkwater	Ash	1	Rot hole	7m,nw,b	5cm round opening, goes in 20cm horizontally, goes up 10cm, goes down 35cm, edges have been chewed by squirrel.	Room for up to 3 bats in the top. More in the bottom but more likely for birds/squirrels at the base	H	H	yes
1033	Emily Drinkwater	Ash	2	Rot hole	7m,n,b	Superficial no hole, just some callus, still full of wood	Not suitable	N	H	yes

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
1033	Emily Drinkwater	Ash	3	Rot hole	6,nw,b	10cm long 5cm wide slot, goes in horizontally 30cm, only goes up 5cm, goes down 40cm. Grey feathers and moss, white egg in situ - discarded.	Room for up to 3 bats but likely to have more birds	M	H	yes
1033	Emily Drinkwater	Ash	4	Rot hole	7.5,ne,b	Top wood pecker hole doesn't go up, split further down that connects, goes horizontally 15cm. Feathers and moss at the bottom. Cavity 30cm long inside.	Room for >3bats	H	H	yes
1035	Emma Clarke	Oak	1	Rot hole	5, E, B	Sheltered cavity 7cm deep	Knot hole on lower branch, deadwood spike coming out, small hole above, room for one bat	L	M	yes
1035	Emma Clarke	Oak	2	Rot hole	4.5, E,B	10x5cm entrance, 25cm deep cavity	Rot hole near end of branch, cavity is horizontal along branch	M	M	yes
1035	Emma Clarke	Oak	3	Tear out	4, W,	2x5cm entrance, 25cm cavity upwards 5cm wide	Old tear out on trunk road side, very small opening to the right side with good upward cavity room for a few bats	M	M	yes
1036	Emily Drinkwater	Oak	1	Branch end cavity/cracks,Crack/split	9.5,NW,B	Dead snapped of branch with splits running through it. High up so checked to be sure. No crevices big enough for bats to squeeze into. Wood had not rotted away from main branch as yet.	Not suitable	L	L	yes
1045	Emma Clarke	Oak	1	Rot hole	6,n,b	Rot hole above lifted bark, entrance 4x3cm, goes back horizontally 5cm and upward 1cm, downwards 5cm. One bat in good weather but unlikely.	Room for 1 bat	L	M	yes
1045	Emma Clarke	Oak	2	Lifted bark	4-6,n,b	3cm opening x 10cm, goes up and is sheltered on the right side but light is coming in from the top. Couple of bats on good weather. Sheltered section at the bottom with a 20cm recess and 1-3cm width.	Room for >3bats	M	M	yes
1045	Emma Clarke	Oak	3	Rot hole	4,se,t	4x3cm entrance, upward facing 4cm. Too shallow. Not suitable.	No bats	N	M	yes
1105	Emily Drinkwater	Oak	1	Rot hole	5,e,b	Linear rot hole on the underside of the branch, checked, no gaps	Not suitable	N	M	yes
1105	Emily Drinkwater	Oak	2	Large hollow	2.5,e,t	30by20cm across and then inwards about 40cm, then goes upwards 20cm, but there is some light coming but a sheltered at the side, then it goes downwards about 50cm and gets bigger and light suitable for birds, moss and feathers found, connects to opening on the opposite side facing west. Really open on that side and doesn't go up any further. Also connected to a hollow on the southern aspect, still very open,	Room for up to 3 bats	M	M	yes
1105	Emily Drinkwater	Oak	3	Rot hole	3m,nw,b	Large rot on branch but no hole	Not suitable	N	M	yes
1105	Emily Drinkwater	Oak	4	Large hollow	2.5m,e,t	25by10cm opening, goes upwards goes in and up about 7cm, quite open, smaller adjacent hole connected goes up 10cm, also goes down 20cm and gets wider suitable for birds at the bottom but not bats.	Room for up to 3 bats	M	M	yes
1105	Emily Drinkwater	Oak	5	Rot hole	2.5,se,t	Opening is 3by5cm, goes up 25cm, doesn't go down	Room for up to 3 bats	M	M	yes
1177	Emily Drinkwater	Oak	1	Rot hole	5.5,S,B	Entrance 5x3cm, 6cm horzinatally, open	Not suitable	N	M	yes
1177	Emily Drinkwater	Oak	2	Crack/split,Rot hole,pruning cut with rot holes and splitting	3.5,S,	2x5cm linear cavity around pruning cut, goes ten 10cm at its deepest part	1-2 bats in good weather	L	M	yes
1177	Emily Drinkwater	Oak	3	Lifted bark,decaying wood with lifted bark, fibourous and dusty	5.5-7,SW,B	Bottom bit, bark lifted away 3cm and only goes in 3xm, top section 4cm away from the wood and goes in 12cm. Very exposed, quite damp inside	1 bat in good weather, very unlikely though.	L	M	yes

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
1177	Emily Drinkwater	Oak	4	Crack/split,Lifted bark,Rot hole	7m,NW,B	Entrance size, 3x6cm, depth 2.5cm	No bats	N	M	yes
1177	Emily Drinkwater	Oak	5	Crack/split,Lifted bark,Rot hole,pitted wood, lots of little cracks, crevices, rot holes in lifted bark.	6-8m,N,B	5.5cm lifted bark from the tree, horizontally 8-10cm, and goes up 30cm.	More than three bats	M	M	yes
1190	Emma Clarke	Oak	1	Crack/split	5.5, W, B	2x3cm opening 4cm inward	Twist/helical split in branch	L	M	yes
1190	Emma Clarke	Oak	2	Large hollow	1.5, E, T	35x20cm opening	Large hollow in trunk, open at the top, allowing light in, some potential crevices around rotting heartwood	M	M	yes
1190	Emma Clarke	Oak	3	Crack/split	3, W, B	40cm crack, 30cm extension upwards	Crack/split in lower part of branch, good upward cavity but fairly cluttered entry	M	M	yes
1190	Emma Clarke	Oak	4	Callus Roll	5, W, B		Callus roll with crack hut ko sheltered cavity or extension	N	M	yes
1191	Emily Drinkwater	Oak	1	Lifted bark	1.5,e,t	Hole in lifted bark, light coming in from above, so likely to get damp, area in side 2cm wide, 20x10cm up and across, unlikely but maybe opportunistic bats in dry weather, some nesting material	Room for up to 3 bats	M	H	yes
1191	Emily Drinkwater	Oak	2	Large hollow	2.5m,S,T	10x10cm opening, goes through a chamber that's open but then there is an enclosed bit, depth 50cm. Large cavity throughout the top section, lots of smaller areas/chambers in side, goes down 40cm, some nesting materials at the bottom.	Room for >3bats	H	H	yes
1191	Emily Drinkwater	Oak	3	Rot hole	2m,NE,T	3by3cm, numerous chambers in side in all directions, between 10-50cm.	Room for >3bats	H	H	yes
1192	Emma Clarke	Oak	1	Crack/split	2, B, NW		Crack in end of small branch, no sheltered cavity	N	L	yes
1192	Emma Clarke	Oak	2	Callus Roll	1.5, NW, B		Callus but no sheltered cavity	N	L	yes
1192	Emma Clarke	Oak	3	Rot hole	1, E, T	Two entry points at top, 7x4cm, 2x5cm	Old tear out, cavity behind but doesn't extend far past the top entry point and is allowing light elements through	L	L	yes
1199	Emily Drinkwater	Oak	1	Large hollow	4m,N/A,T	Trunk cavity with four entrances in the top of an old coppice. N facing cavity is largest, 10 by 10cm, goes in 40cm. Another 10 by 15cm, goes in 20cm. 3rd 10 by 15cm goes in 15cm in a few directions. Another is superficial.	Room for >3bats	H	H	yes
1199	Emily Drinkwater	Oak	2	Rot hole	4m,W,b	5by5cm, shallow, open. 5cm	Not suitable	N	H	yes
1199	Emily Drinkwater	Oak	3	Rot hole	4m, S,T	3by3cm, 5cm depth, too shallow and open	Not suitable	N	H	yes
1200	Emma Clarke	Oak	1	Large hollow	1-2, NE, T		Large hollow with very small upward extention at top. There is an exposed section of heartwood with gaps under plates but mostly open from the top, room for a couple of bats overall. Large feature	M	M	yes
1201	Emily Drinkwater	Oak	1	Rot hole	4.5m,E,T	4by4cm opening in top of trunk. Goes in and slightly upwards 30cm	Room for >3bats	H	H	yes
1201	Emily Drinkwater	Oak	2	Rot hole	4.5,w.t	Base of tree branch close to trunk, 4x3cm opening, extends in and slightly upwards 25cm	Space for up to three bats	M	H	yes
1201	Emily Drinkwater	Oak	3	Rot hole	4.5,SE,B	Base of base towards trunk. Opening 4by4cm, extends in and upwards 20cm	Space for a single bat	M	H	yes
1201	Emily Drinkwater	Oak	4	Rot hole	6m,E,B	3by3cm opening, very shallow, 5cm	Not suitable	N	H	yes
1203	Emily Drinkwater	Oak	1	Rot hole	1.5m,W,T	Rot holes in trunk- some connected, quite open, two areas with shallow crevices, 5by5cm gaps only extending 5-10cm. Unlikely, can't be ruled out	Space for one opportunistic bat	M	M	yes

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
1205	Emma Clarke	Oak	1	Branch end cavity/cracks	4, S, B	Extends down only 5cm	Old dead branch, slight cavity to side of heartwood,	L	L	yes
1205	Emma Clarke	Oak	2	Crack/split	6, E, B		Crack goes through to other side no dark/sheltered cavity	N	L	yes
1205	Emma Clarke	Oak	3	Rot hole	5, W, B	Extends 5cm inward	Small knot hole	L	L	yes
1206	Emily Drinkwater	Oak	1	Rot hole	8.5m,E,B	Too small - 1cm gap along callus roll	Not suitable, too small a gap	N	N	yes
1207	Emma Clarke	Oak	1	Lifted bark,Rot hole	7, E, B	Going back 15cm horizontally	Lifted bark, fairly open. Rot hole	M	H	yes
1207	Emma Clarke	Oak	2	Lifted bark	7, E, B		Lifted bark some sealed closed and others too smaller entry point or open from the top	L	H	yes
1207	Emma Clarke	Oak	3	Branch end cavity/cracks,Crack/split,Rot hole	6, S, B		Dead branch with several cavities in heartwood, room for a few bats, could be a bit airy	M	H	yes
1207	Emma Clarke	Oak	4	Rot hole	5, NE, B		Knot hole, large opening trending downwards, room for one or a couple of bats but airy	L	H	yes
1207	Emma Clarke	Oak	5	Rot hole	3, E, T	Entrance 20x8cm, inside trending upwards 30cm	Rot hole in side of trunk, upward cavity	H	H	yes
1209	Emma Clarke	Oak	1	Rot hole	3, T		Large complex hollow feature in base of crown, lots of knarled dead heart wood and crevices which are fairly open and connect to other openings, which are wide. Due to extent of feature a few bats would find shelter	M	M	yes
1209	Emma Clarke	Oak	2	Rot hole	3, S, T	10x8cm opening, cavity 10cm back	Knot hole	M	M	yes
1210	Emily Drinkwater	Oak	1	hazard beam	5m,W,T	5cm opening, 20cm depth horizontally	Room enough for 1 or 2 bats	M	M	yes
1211	Emma Clarke	Oak	1	Rot hole	4	4cm diameter at entrance, 15cm inwards down slightly		M	M	yes
1211	Emma Clarke	Oak	2	Rot hole	4, W, B		Large knot hole connects to large open top no sheltered cavity	N	M	yes
1211	Emma Clarke	Oak	3	Rot hole	2.5, S, B		Old branch location on trunk which is rotten, cavity extending 40cm horizontally narrow, room for several bats	M	M	yes
1212	Emma Clarke	Oak	1	Large hollow,Rot hole	4, E, B	10cm entrance upward facing, but 30cm inward extention horizontally 7 cm wide throughout	Large branch with rotten part towards base,	H	H	no
1212	Emma Clarke	Oak	2	Rot hole	4, NE, B		Small bowl shapes hollow on upside of large knuckle of branch, cavity with room for a couple of bats and sheltered from wood and branch above	M	H	yes
1212	Emma Clarke	Oak	3	Lifted bark	4, N, B		Knarled dead branch, rotting on top and lifted bark underneath, fairly loose but some parts tighter creating space for a couple of bats	L	H	yes
1212	Emma Clarke	Oak	4	Large hollow	0-5, T	0.5m across	The whole of the trunk is hollowed out, 0.5m across and all the way to the ground, can't go inside, could have hidden features to sides	M	H	yes
1213	Emma Clarke	Oak	1	Rot hole	5, B/T		Three rot holes travelling up branches at hollow at base of canopy. Largest 20cm upward cavity	M	H	yes
1213	Emma Clarke	Oak	2	Large hollow	0.5, E, T	Extends upwards 70cm	Large hollow at the bottom of tree, which goes up to smaller crevices at the top, separated by heartwood	H	H	no
1255	Emily Drinkwater	Oak	1	Crack/split	6m,SW,B	5cm wide by 20cm split, 15cm downwards, doesn't go up.	Room for up to 3 bats	M	H	yes
1255	Emily Drinkwater	Oak	2	Large hollow	3m,N,T	60cm by 40cm opening. 2m deep into the case of the trunk, floor can be scene. Similar feature on the other side which connects to it. Goes upwards in the branches by about 20cm in two directions, jagged bark inside, goes up again about 80cm in another direction	Space for >3 bats	H	H	yes
1284	Emily Drinkwater	Oak	1	Dense ivy	All over	N/A	Dense ivy - not climbed	M	M	no

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
1291	Emma Clarke	Oak	1	Dense ivy	All over		Thick ivy at base, too far out from tree to create crevice feature, very dense above, can't be climbed, precautionary mod	M	M	no
1292	Emily Drinkwater	Oak	1	Pruning cut, decaying	3.5, SW, B	3cm wide, 10cm depth horizontally	Room enough for one 1 bat	M	M	yes
1292	Emily Drinkwater	Oak	2	Rot hole	3.5m, W, B	4cm wide, depth is 20cm horizontally towards the trunk	Enough room for a few bats, but will probably be effected by wind as no upward facing cavity	M	M	yes
1292	Emily Drinkwater	Oak	3	Rot hole	4m, SE, B	2cm wide, 5cm horizontal, superficial, not suitable	Negligible	N	M	yes
1292	Emily Drinkwater	Oak	4	Rot hole	5m, SE, B	2cm wide, 3cm depth	Superficial not suitable	N	M	yes
1294	Emily Drinkwater	Oak	1	Rot hole	4m,W,B	4cm wide, 10cm deep horizontally. Can't be seen from ground	Room for up to 3 bats	M	M	yes
1294	Emily Drinkwater	Oak	2	Crack/split	5m,E,B	6by3cm slit in branch where is burst open, doesn't have a cavity either side	Not suitable	N	M	yes
1294	Emily Drinkwater	Oak	3	Large hollow	4.5m,E,T	Large tear out/hollow in trunk extending from the ground to 4.5m high. Huge cavity, numerous features and dead wood, callus roll either side running down. 15by15cm opening in the South facing branch, goes upwards 20cm but very open. Unlikely. On the Nothern branch there is a cavity going upwards, opening 15by15cm but narrows further up to approximately 5-10cm, 15cm depth. Lower down at 1m high facing north there is cavity in the heart wood, opening 4cm by 10cm, goes up 30cm in side. Quite low down for a feature	Room for up to 3 bats	M	M	yes
1299	Emma Clarke	Oak	1	Large hollow	4, SW, T	Entrance 20x40cm, cavity 10cm inwards horizonally	Large hollow, goes in but wide entrance, lots of cobwebs at time of survey	M	H	yes
1299	Emma Clarke	Oak	2	Large hollow	4.5	50 cm down ward extension	Large hollow/callus, open at the top extending downwards, more suitable for birds, very small cavities at sides of callus.	L	H	yes
1299	Emma Clarke	Oak	3	Large hollow	3, SW, T	Top of hollow with 40cm extension upwards, 10cm wide but narrow depth	Good cavity extending upwards from large hollow, enough room for several bats, clear entrancev	H	H	yes
1303	Emma Clarke	Oak	1	Pruning cut/callus	5, S, B	5cm by 1cm entrance, goes in 2cm	Tiny gap at edge of old pruning cut, when inspected, only goes back 2cm	N	L	yes
1303	Emma Clarke	Oak	2	Rot hole	4, W, B	2cm by 4cm entrance, goes back 5cm	Rot hole with small cavity, entrance is small creating shelter for one bat	L	L	yes
1303.1	Emily Drinkwater	Oak	1	Rot hole	7m, S, B	2cm wide, 2cm depth	Superficial, not suitable	N	H	yes
1303.1	Emily Drinkwater	Oak	2	Branch end cavity/cracks,Rot hole	3m, W, T	Superficial	Not suitable	H	H	yes
1303.1	Emily Drinkwater	Oak	3	Rot hole	3.2m,NE,B	10-15cm wide, goes in horizontally 20cm, goes upwards 20cm	Perfect hole for a birds nest/owl, connected to a second rot hole below, facing east	H	H	yes
1307.1	Emma Clarke	Oak	1	Crack/split	5-6, W, B		Dead branch with split, superficial when inspected not suitably sheltered, open crack	N	M	yes
1307.1	Emma Clarke	Oak	2	Rot hole	3, S, T	15cm cavity to side of heartwood, 5cm wide entrance,	Knot hole or old pruning cut with room for a couple of bats	M	M	yes
1307.2	Emma Clarke	Oak	1	Crack/split	3.5, W, B	Cavity going in for 10cm narrowing.	Spilt in branch, room for a single bat	L	L	yes
1307.3	Emma Clarke	Oak	1	Rot hole	5, W, B	5x6cm opening, travels horizontally towards the trunk for about 15cm	Small tear out with rot hole at the bottom	M	M	yes
1307.4	Emily Drinkwater	Oak	1	Tear out	4.5m,NE,T	Tear out with a slit on the left hand side by the callus roll, slit is 10cm long and 3cm wide. Goes in horizontally 6cm, goes upwards 30cm	Space for >3 bats	H	H	yes

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1307.4	Emily Drinkwater	Oak	2	Rot hole	2m,NW,T	Opening 5by5cm, goes upwards 60cm, shallow gaps under the callus up to 5cm but the main feature is above.	Space for up to 3 bats	M	H	yes
1307.4	Emily Drinkwater	Oak	3	Rot hole	2m,N,T	10by4cm opening, goes in and upwards 15cm.	Space for up to 3 bats	M	H	yes
1307.4	Emily Drinkwater	Oak	4	Crack/split	6m,S,B	20cm by 1cm split in an old pruning cut, narrows to no gap.	Not suitable	N	H	yes
1307.5	Emily Drinkwater	Oak	1	Dense ivy	N/A	Very leafy, difficult to see thickness of ivy roots, no features visible on the branches not covered with ivy or lower trunk, only dense in the middle section, light above and below.	Unknown	L	L	no
1307.6	Emily Drinkwater	Oak	1	Base of dead branch stubs	All over	Numerous features, all the same. Dark areas around branch stubs. All checked, no cavities. Photo example.	Not suitable	N	N	yes
1307.6	Emily Drinkwater	Oak	2	Rot hole	5.5m,E,B	6by3cm callus surround but no hole underneath	Not suitable	N	N	yes
1316	Emma Clarke	Oak	1	Rot hole	5, E, B	Entrance 20 x 5cm	Callus on underside of uoward facing branch with no deep extension, room for one bat at side or top but fairly exposed.	L	M	yes
1316	Emma Clarke	Oak	2	Callus/dead branch	10, E, B		Dead branch in upper canopy with heart wood exposed/bark healing around, cavity is open to the side, no extending/dark cavity	N	M	yes
1316	Emma Clarke	Oak	3	Rot hole	6, NW, B		Callus roll/ large open hollow, but with only a small upward extension with then opens out into another entrance allow light in and open to elements	L	M	yes
1316	Emma Clarke	Oak	4	Rot hole	6, S, B	35cm horizontally and 5cm wide, extends downwards 10cm,	Dead branch with callus roll, gap at side of heartwood, sheltered above	M	M	yes
1316	Emma Clarke	Oak	5	Rot hole	5.5, S, B	10x3cm opening, extends 5cm inward	Small opening at old dead branch/ exposed heartwood, room for a bat or a couple	M	M	yes
1316	Emma Clarke	Oak	6	Callus roll	8, SW, B		Large callus wound/dead branch, callus on both sides with gaps under exposed heartwood but not extending up/down	L	M	yes
1325	Emily Drinkwater	Oak	1	Lifted bark	3.5m,E,B	20cm long section lifted bark	Not wide enough to squeeze a bat in	N	M	yes
1325	Emily Drinkwater	Oak	2	Rot hole	3.5m,w,b	5by5cm wide, 2cm recess, too shallow	Not suitable	N	M	yes
1325	Emily Drinkwater	Oak	3	Large hollow	3m,N,T	Starts at 3m high and goes down to the base, quite a lot of wood still in the cavity, no suitable gaps at the top, callus on left side has a recess of about 15cm in to the trunk. The rest of the callus us tight to the heart wood no gaps.	Enough room for up to three bats.	M	M	yes
1330	Emily Drinkwater	Oak	1	Crack/split	9m,S,B	5cm wide, 10-15cm depth, downward facing	In the top of dead wood, even though downward facing it has a 'roof' branch above	M	Roost	yes
1330	Emily Drinkwater	Oak	2	Rot hole	5.m,NE,B	2m split on the top side of branch. Top of enclosed feature is 7cm wide, 20cm depth, contains moss/feathers	Suitable for a few bats	M	Roost	yes
1330	Emily Drinkwater	Oak	3	Rot hole	5.5m,S,B	4cm width, 8cm depth, fairly horizontal	Enough room for one bat	M	Roost	yes
1330	Emily Drinkwater	Oak	4	Rot hole	8m,S,B	5cm, 35cm until bat reached	Pipistrelle bat in situ, could be more behind, narrow hole.	Roost	Roost	yes
1331	Emma Clarke	Oak	1	Large hollow	2.5, E, B	Extends 30cm inward	Canopy base/top of trunk going up into branch, wide cavity narrowing into branch trending upwards, sheltered from above	H	H	yes
1331	Emma Clarke	Oak	2	Large hollow,Rot hole	2.5, W, B		Hollowed out base of dead branch/rotting trunk, cavity under heartwood plate but either cracks at side, fairly open	M	H	yes
1331	Emma Clarke	Oak	3	Crack/split,Rot hole	5, W, B	Extends 10cm inward	Large open callus on upside of branch, does go in horizontally at one side and is sheltered	L	H	yes
1331	Emma Clarke	Oak	4	Large hollow	3, S, T		Hollowed out trunk, huge cavity, open from the top. Some potential around the edges where it is sheltered.	M	H	yes
1331.1	Emily Drinkwater	Oak	1	Large hollow	2.5m,SW,B	Starting at the top of the trunk and into a large branch. 15by15cm opening at the top, goes in 30cm. Same feature	Room for more than 3 bats	H	H	yes

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						with a cavity at the bottom, opening 50by15cm at the base with no cavity.				
1331.1	Emily Drinkwater	Oak	2	Large hollow	3m,NE,B	10by10cm opening, 30cm deep horizontally	Room for more than 3 bats	H	H	yes
1332	Emily Drinkwater	Oak	1	Rot hole	7m,S,B	Opening 2cm high, slot shaped cavity, 20cm wide, extends inward 40cm	Multi chamber	H	H	yes
1333	Emma Clarke	Oak	1	Dense ivy	All over		The ivy at the bottom is latticed creating a large shelter cavity around 4cm deep and 30x30 endoscoped from ground, no bats but higher ones not able to be inspected	M	M	no
1337	Emma Clarke	Oak	1	Rot hole	2.5, W, T	7x6cm entrance, 50cm horizontally	Good cavity would fit several bats	H	H	yes
1337	Emma Clarke	Oak	2	Rot hole	2.5, W, T	8x10cm entrance, 5cm wide cavity extending 20cm upwards	Rot hole in side of old pruning cut	M	H	yes
1337	Emma Clarke	Oak	3	Rot hole	2.7, SW, B		Extends in but open from front/light	L	H	yes
1337	Emma Clarke	Oak	4	Tear out	1.5, W, T	30x3cm opening, large internal size	Gap at edge of old tear out on trunk, travels back 60cm and cavity 5cm deep covering large span of trunk	H	H	yes
1367	Emily Drinkwater	Willow sp	1	Wood pecker hole	15m,NW,B	5cm round, 8cm horizontally. Doesn't go up or down	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	2	Wood pecker hole	14m,NW,B	5cm round, 10cm horizontally, 2cm upwards, doesn't go down	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	3	Wood pecker hole	13.5,NW,B	7cm round, 20cm horizontally, upwards 5cm, goes down 50cm	Even though it doesn't go up, BLEs sometimes sit at the bottom of a recent sized whole so potential for >3 bats	M	H	yes
1367	Emily Drinkwater	Willow sp	4	Wood pecker hole	13.1,NW,B	7cm round opening, 25cm horizontally, 5cm upwards, 10cm downwards	Not suitable, no substantial cavity away from the opening	N	H	yes
1367	Emily Drinkwater	Willow sp	5	Wood pecker hole	12.5,NW,B	5cm opening, 7cm horizontally, doesn't go up or down.	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	6	Large hollow	12,NE,B	5cm round opening, 7cm horizontally, goes down and upwards 35cm deep, can't see from the ground so didn't take a photo.	Room for more than 3 bats	H	H	yes
1367	Emily Drinkwater	Willow sp	7	Wood pecker hole	12,NW,B	5cm opening, 8cm horizontally, no up or down	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	8	Wood pecker hole	11.8,NW,B	5cm opening, 10cm horizontally, no up or down	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	9	Wood pecker hole	11.5,NE,B	Two connected holes, bottom hole is 7cm round opening, top is 4cm opening, from the bottom one goes down into a large bowl cavity 40cm, could get birds in there, there is a smaller cavity approximately 15cm extending upwards.	Room for more than 3 bats underneath and a few in the top bit	H	H	yes
1367	Emily Drinkwater	Willow sp	10	Branch end cavity/cracks,Rot hole	12.5,SE,B	Cracks at the end of a snapped off branch with a small hole. All shallow, no more than 2cm.	Superficial	N	H	yes
1367	Emily Drinkwater	Willow sp	11	Rot hole	13m,N,B	50cm slot, 4cm wide, at the top a small 2by2cm hole, goes straight 10cm, doesn't go down	Room for up to 3 bats	M	H	yes
1367	Emily Drinkwater	Willow sp	12	Rot hole	9.5m,NW,b	Rot hole with a callus roll, multiple entrances, open the top 3by7cm opening, 40cm long, three gaps halfway and the bottom is open. Really open.	Unlikely - very open	L	H	yes
1367	Emily Drinkwater	Willow sp	13	Wood pecker hole	10.5,NW,b	4by5cm opening, 15cm horizontally, goes up 10cm, doesn't go down	Room for up to 3 bats	M	H	yes
1367	Emily Drinkwater	Willow sp	14	Rot hole	5m,NW,b	Slot - 10cmby1.5cm opening, then gets narrower. Too small, goes back 4cm	Not suitable	N	H	yes
1367	Emily Drinkwater	Willow sp	15	Branch end cavity/cracks	4m,S,B	6cm opening, going upwards 1.2m deep	Room for more than 3 bats	H	H	yes
1373	Emily Drinkwater	Oak	1	Branch end cavity/cracks	8m,NW,B	Inspected no cavity	Not suitable	N	N	yes

Tree no.	Surveyor Name	Tree Species	PRF No.	PRF Type	PRF height (m), aspect (NSEW), trunk or branch (t/b)	PRF dimensions (if possible)	PRF description	PRF category	Tree Category	Full inspection possible?
1373	Emily Drinkwater	Oak	2	Rot hole	3.5m,W,T	Shallow, goes in 5cm horizontally, doesn't go upwards. Extends downwards by 10cm. More like for a birds nest.	Highly unlikely due to downwards shallow cavity.	N	N	yes
1461	Emily Drinkwater	Oak	1	Rot hole	4m,W,B	40cm long rot hole with callus, 3cm wide, goes in about 4cm, goes down at the base by 6cm, only goes upwards 2cm. Not suitable. No proper cavity.	Not suitable	N	N	yes
1461	Emily Drinkwater	Oak	2	Branch end cavity/cracks,Crack/split	3.5m,S,B	Series of cracks and splits in the end of a snapped branch. Gaps too narrow.	Not suitable	N	N	yes
1461	Emily Drinkwater	Oak	3	Rot hole	3.5m,S,B	End of a dead branch, small rot hole, 5by3cm entrance but only goes in 2cm, too shallow	Not suitable	N	N	yes
1490	Emily Drinkwater	Oak	1	Branch end cavity/cracks,Crack/split	5m,E,B	Series of cracks/splits at a snapped off branch. Crack at the top forms a small hole, 4cm by 1-2cm crack, then goes into 7cm, 20cm further down the snapped branch 20cm split across, opening 4by1-2cm, 15cm deep, upwards, cobwebs, debris. Down into the split, quite deep, with feathers, moss, and oak leaves, slightly widens to 10-15cm.	Room for a single bat	M	M	yes
1490	Emily Drinkwater	Oak	2	Branch end cavity/cracks	6m,E,B	Looks like a large split from below but there is no cavity, snap out on end of branch	Not suitable	N	M	yes
1496	Emma Clarke	Oak	1	Rot hole	6, SE, B	5cm entrance, 30cm cavity	Rot hole with cavity extending into branch	M	M	yes
1496	Emma Clarke	Oak	2	Crack/split	6.5, E, B	10cm cavity, 6x3 entrance	Spilt with upward cavity going back 10cm sheltered from above	M	M	yes
1496	Emma Clarke	Oak	3	Crack/split	3-4, B		Several cracks/splits in deadwood at the base of crown but all too open/no real cavities	N	M	yes
1496	Emma Clarke	Oak	4	Rot hole	3, NW, B	5cm entrance, 30cm deep	Rot hole, cavity extending horizonal then down for 30cm	M	M	yes
1496	Emma Clarke	Oak	5	Tear out	3, W, B	4x15cm	Upward facing cavity on upward side of tear out on large branch, sheltered from above	M	M	yes
1496	Emma Clarke	Oak	6	Rot hole	3.5, N	5cm opening 30cm cavity	Dead branch with cavity in the middle trending upwards 30cm but with a couple of cracks letting light in.	L	M	yes
1499	Emma Clarke	Oak	1	Rot hole	2.5, SE, B		Lower branch with knot hole cavity facing outwards goes down sheltered above but opening back out after 12cm. Light/airy	L	L	yes
1499	Emma Clarke	Oak	2	Crack/split	6, NW, B		Helical split, no sheltered cavity	N	L	yes
1803	Emma Clarke	Willow sp	1	Crack/split	2, S, T	Cracks 1m, opening to cavity 3x3cm	Twist/crack feature in leaning stem. Mostly exposed from side with no inward cavity. One small sheltered cavity, only room for one bat	L	L	yes
1805	Emily Drinkwater	Oak	1	Crack/split,transverse snap	6,nw,b	1cm splits in snapped branch, no shelter, two small crevices at the base but no roof, depth 1-2cm, not suitable	No bats	N	N	yes
1815	Emma Clarke	Oak	1	Rot hole	5.5, W, T	10x12cm	Cavity goes in horizontally around 15cm, bark covering, providing shelter, room for a couple of bats	M	M	yes
1815	Emma Clarke	Oak	2	Lifted bark,Rot hole	5.5, E, T	5-6cm wide around one side and top of deadwood.	Dead branch with bark around the edge leaving gap, depth 5cm, shelter from above by bark, couple of bats would fit	M	M	yes
1815	Emma Clarke	Oak	3	Rot hole	5.5, E, B	2.5x4cm entrance and another the same size further along branch	45cm cavity in between entrances, around 4cm wide inside, dark and sheltered	M	M	yes
1815	Emma Clarke	Oak	4	Lifted bark	4, S, B		Lifted bark around lower dead branch, open from above.	L	M	yes
1823	Emma Clarke	Willow sp	1	Crack/split	3.5, SE, B	Large 2m crack feature	Twisted branch with deep cracks below, open to entrance facing out north/upwards (25x12cm) and east (30x40cm) and fairly open with cracks also on west side and open underneath. There is a plate of deadwood with access underneath, with 15cm cavity going out towards branch, sheltered, room for a couple of bats	M	M	yes
1823	Emma Clarke	Willow sp	2	Crack/split	3.5, SE, B	Large 2m crack feature	Twisted branch with deep cracks below, open to entrance facing out north/upwards (25x12cm) and east (30x40cm) and fairly open with cracks also on west side and open underneath. There is a plate of deadwood with access underneath, with	M	M	yes

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							15cm cavity going out towards branch, sheltered, room for a couple of bats			
1823	Emma Clarke	Willow sp	3	Wood pecker hole	3.5, N, B	4x5cm entrance	Rot hole/woodpecker hole, 7cm deep horizontally and then travelling upwards 25cm, room for a couple of bats	M	M	yes
1826	Emily Drinkwater	Oak	1	Rot hole	4.5,nw,b	2x2cm entrance, Goes in and down 5cm, very shallow but a bit of protected from the elements.	Unlikely but one bat in good weather possibly.	L	L	yes

APPENDIX C

Dusk emergence and/or dawn re-entry survey at moderate and high potential trees: raw data

Tree No.	X	Y	Observation point (s)	Equipment Used	2022 Survey Date	Lead Surveyor	Sunset/ Sunrise time	Weather Conditions	Notes	Roost Y/N	Roost Details	Other Notable Details
662	611728	227769	1, 2	2 x Batlogger M2 and Canon XA10 IR Camera	03-Aug	Katie Jones	05:20	Patchy cloud, rain 0, wind 0.3, start temp 19 end temp 17	Surveyor 1 -03:29- c.pip, HNS; 03:30- c.pip, HNS; 03:48- noctule, HNS; 03:51- nocutle, HNS, faint; 03:56- c.pip, HNS, foraging; 04:06- c.pip, HNS, foraging; 04:12- c.pip, HNS, foraging. Surveyor 2 - 03:44- pip spp., HNS, commuting & foraging, (heard again at 03:53, 04:07);	N		Muntjac and brown hares observed
			1, 2	2 x Batlogger M2 and Canon XA10 IR Camera	15-Aug	Charlie Kempson	20:19	Patchy cloud, rain 0, wind 2, start temp 22 end 17	Surveyor 1 No roosts and no clear emergences. South of large reservoir (bugs); 21:03 - first bat HnS; 21:06 - pipistrelle observed commuting through tree; Several pips seen commuting/foraging above tree throughout survey ; Several recordings from bats behind OBS 1; 21:21-21:23 noctule HnS; 21:47-21:50 serotine foraging above tree. Surveyor 2 First call heard at 20.40. 4 pips foraging in hedgerow to left from 20.40-21.00. Reasonable amount of activity of serotines and pips right up to the end of the survey. No roosts. No emergences seen from footage. 34 recordings on logger - mostly pipistrelles from preview list. 09:03 - commuting bat in background	N		
			1, 2	2 x Batlogger M2 and Canon XA10 IR Camera	07-Sep	Gemma Hill	06:17	Patchy cloud, rain 0, wind 13, start temp 15 end temp 15	Soprano pips recorded at 04:51, 05:07, 05:22, 05:35 and 05:39. HNS. Noctule detected at 04:52. Common pipistrelle detected, HNS at 04:59.	N		
838	611275	227385	3, 4	2 x Batlogger M2 and Canon XA10 IR Camera	22-Jul	Kevin McGee	05:03	Overcast, rain 0, wind 6, start temp 16 end temp 16	Surveyor 1 Low numbers of Common & Soprano Pipistrelle foraging continuously in the canopy until it became lighter when all activity stopped. Surveyor 2 One Daubenton's bat signal near the start of the survey. Constant foraging in the canopy by low numbers of Common & Soprano Pipistrelle during the dark hours, but all activity disappeared as it became lighter. Occasional Noctule overhead.	N		Little owl and muntjac heard calling, barn owl observed in flight to the east.
			3, 4	2 x Batlogger M2 and Canon XA10 IR Camera	02-Aug	Anna Volak	20:43	Patchy cloud, rain 0, wind 0.2, start temp 22 end temp 20	Surveyor 1 21:41- HNS, pip spp., commuting; 21:53- HNS, pip spp., cmuting; 21:01- unknown spp., very quiet, 42khz. Surveyor 2 21:22- Noctule, foraging, seen in the open field; 21:44- c.pip, HNS; 21:55- c.pip, HNS.	N		Also seen- cormorant fly-by, nesting buzzards in nearby tree
874	611118	227636	5, 6	2 x Batlogger M2 and Canon XA10 IR Camera	22-Jul	Shannon Davies	05:03	Overcast, rain 0, wind 7, start temp 15 end temp 15	Cannot see the specific tree due to over trees in the area. Area viewed in general incase anything came from that direction. First recording: one common pipistrelle foraging around the pond area from 03:00. Common and Soprano Pipistrelle foraging contiuously from the start of survey until 04:16. Possible myotis recording from 04:00-04:16.	N		
			5, 6	2 x Batlogger M2 and Canon XA10 IR Camera	03-Aug	Amy Gill	20:42	Patchy cloud, rain 0, wind 10, start temp 24 end temp 22	Surveyor 1 21:21 - x1 noctule heard not seen; 21:30 until end of survey - common pip foraging. Surveyor 2 Very humid day. Nocs heard not seen a couple of times during survey. Common pips and soprano pips foraging over pond (up to 3 bats at once) and amongst trees	N		Landowner came to talk, said there were badgers to the west of obs point 7, near 3 oak trees.

									from 21:26 - 22:00. Sporadic bat activity heard until 22:11. Long eared @ 22:21?			
			5, 6	2 x Batlogger M2 and Canon XA10 IR Camera	06-Sep	Gemma Hill	19:31	Patchy cloud, light showers, wind 13, start temo 19 end temp 19	Surveyor 1 Soprano pipistrelle recorded at 19:44 then again at 20:03.; Two soprano pipistrelle then seen foraging around tree constantly flying overhead till the end of the survey. Foraging common pipistrelle seen foraging at 20:04. Noctule HNS at 20:35. Surveyor 2 One noctule recorded at 19:52. Rain at the beginning of survey then eased off.	N		
909	611009	228178	13, 14	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Kevin McGee	21:01	Overcast, rain 0, wind 9, start temp 18 end temp 17	Surveyor 1 - Low numbers of passes by Common Pipistrelle. Occasional Noctule overhead. Surveyor 2 Low number of passes by Common Pipistrelle. Occasional Noctule overhead.	N		Tawny owl and brown hare observed.
			13, 14	2 x Batlogger M2 and Canon XA10 IR Camera	04-Aug	Anna Volak	05:22	Patchy cloud, rain 0, wind 0, start temp 21 end temp 20	Surveyor 1 - Survey start - 04:35- c.pip, foraging round surveyor and tree, caught on camera; 03:38- BLE?, HNS; 03:51- Noctule, HNS, commuting; 03:58- two c.pips foraging round tree and surveyor, caught on camera; Surveyor 2 - 03:29- c.pip, HNS; 03:30- c.pip, foraging around tree; 03:48- noctule, HNS; 04:07- c.pip, foraging; 04:12- c.pip, foraging around tree;	N		Tawny owl calls heard; brown hare and muntjac sighted
			13, 14	2 x Batlogger M2 and Canon XA10 IR Camera	17-Aug	Charlie Kempson	20:01	Hazy, rain 0, wind 5, start temp 18 end temp 17	Surveyor 1 No calls. Surveyor 2 No roosts. No emergences observed from footage. Very quiet - only 2 pipistrelle recordings throughout whole survey.	N		
921	610979	228141	15,16	2 x Batlogger M2 and Canon XA10 IR Camera	17-Aug	Charlie Kempson	20:15	Hazy, rain 0, wind 6, strat temp 18 end temp 18	4 observation points with 2 human surveyors and 2 camera surveyors, Surveyor 1 No roosts. No emergences seen from footage. Quiet survey - 5 recordings altogether. All pipistrelle recordings. Surveyor 2 - No roosts. No bat activity around tree. Quiet survey. Only 3 pipistrelles HnS. Other recordings mostly 35ish frequencies - don't sound like bats but short sounds.	N		
			15,17	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Shannon Davies	21:01	Patchy cloud, rain 0, wind 14, start temp 17 end temp 16	Surveyor 1 - Noctule recorded from 21:37 circling trees, then not seen. Pipistrelle seen foraging in trees from 21:49-22:19. No roosts recorded. Surveyor 2 - First recording: one passing noctule flying south to North along treeline at 21:35. 22:01 one Soprano and one common pipistrelle foraging around treeline. Summary quiet night, three species recorded.	N		
926	610961	228232	11,12	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Giselle Hynes	05:31	Cloud 0, rain 0, wind 5, start temp 16 end temp 14	No roosts. Quiet Survey. 03:54 - commuting pipistrelle observed. No re-entries or activity observed surrounding tree.	N		
			12	Batlogger M2 Canon XA10 IR Camera	21-Jul	Amy Gill	21:01	Overcast, rain 0, wind 10, start temp 18 end temp 16	Tree only surveyed from South West side. No roost identified. 21:35 - noctuke HNS. 21:48 - Soprano pips detected. HNS. Common pips heard throughout survey	N		
930.1	610941	227728	7,8	2 x Batlogger M2 and Canon XA10 IR Camera	03-Aug	Anna Volak	20:42	Hazy, rain 0, wind 1, start temp 23 end temp 20	Limited visibility of tree- only the very top of the canopy can be seen/ Survey tree located in a copse of trees. Visibility Partially blocked by other tree canopies. Surveyor 1 Noctule 21:19	N		

									HNS, several C.pip HNS Surveyor 2 Big bat sp 21:15 HNS (heard again at: 21:19, 21:29, 21:55), 21:26- pip spp., HNS, foraging & commuting (heard again at: 21:31, 21:41, 21:43)			
			N of 7x2, NE of 7 (track)	2 x Batlogger M2 and Canon XA10 IR Camera	22-Jul	Guy Ostler	05:03	Overcast, rain 0, wind 5, temp start 16 temp end 16	No roost identified. Common pipistrelle foraging. Soprano pip detected. Red legged partridge heard. Surveyor 2 Common pip foraging along track from 02:55 onwards (frequently passing then occasional), 03:04 - myotis HNS. Passing until 03:12, 04:33 - Soprano pip HNS Surveyor 3 All three surveyors located along the track North of obs 7, good coverage and visibility of the tree, Common pipistrelle foraging up and down track at start of survey until 04:23. Soprano pip joined for a wile also.	N		
941	610921	228244	10	Batlogger M2 Canon XA10 IR Camera	21-Jul	Guy Ostler	21:00	Overcast, rain 0, wind 10, start temp 18 end temp 16	Tree only being surveyed from south-west side. No roost identified. Soprano and common pips detected	N		Muntjac, brown hare, barn owl seen.
			11, 12	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Hannah McBlain	05:31	Cloud 0, rain 0, wind 6, start temp 16 end temp 14	No roosts. Quiet survey. 03:54 - commuting pipistrelle observed. No re-entries or activity observed surrounding tree.	N		
951	610896	228264	10	Batlogger M2 Canon XA10 IR Camera	21-Jul	Amy Gill	05:01, 21:01	Patchy cloud, rain 0, wind 10, start temp 18 end temp 17	Tree only being surveyed from West/South West Side due to refused access, thus visibility is not great with woodland being behind trees.	N		
			10, 9	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Shannon Davies	05:31	Cloud 0, rain 0, wind 6, start temp 12 end temp 12	Surveyor 1 -First recording was a brief common pipistrelle recorded at 04:10 but not seen. Soprano pipistrelle briefly heard but not seen at 4:44. Surveyor 2 - First recording was a long eared at 04.07. Last call was a pipistrelle at 04.45. Minimal activity in between.	N		Barn owl roosted within T951.1 at 04.20 appeared to roost in trunk cavity approx 5m up. Did not fly away from surveyed trees.
951.1	610898	228265	10	Batlogger M2 Canon XA10 IR Camera	21-Jul	Amy Gill	05:01, 21:01	Patchy cloud, rain 0, wind 10, start temp 18 end temp 17	Tree only being surveyed from West/South West Side due to refused access, thus visibility is not great with woodland being behind trees.	N		

			10, 9	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Shannon Davies	05:31	Cloud 0, rain 0, wind 6, start temp 12 end temp 12	Surveyor 1 -First recording was a brief common pipistrelle recorded at 04:10 but not seen. Soprano pipistrelle briefly heard but not seen at 4:44. Surveyor 2 - First recording was a long eared at 04.07. Last call was a pipistrelle at 04.45. Minimal activity in between.	N		Barn owl roosted within T951.1 at 04.20 appeared to roost in trunk cavity approx 5m up. Did not fly away from surveyed trees.
1030	610603	227275	17, 18	2 x Batlogger M2 and Canon XA10 IR Camera	02-Aug	Amy Gill	20:43	Cloud 0, rain 0, wind 12, start temp 24 end temp 20	No roost identified. 21:38 - soprano flew straight past my head from behind me (east) and headed south towards T1028. 21:47 - pip sp commuting overhead from North to southeast. Pip sp heard not seen twice towards end of the survey,	N		
			17, 18	2 x Batlogger M2 and Canon XA10 IR Camera	06-Sep	Sally Wilding	19:31	Overcast, light showers, wind 9, strat temp 19 end temp 17	One pip heard- very low activity - no emergence. Surveyor 2 19:57 - pippyg HNS. Then some pip foraging activity. 20:14 - pippip heard and seen flying from North, circling in front of tree and flying back north.	N		
1033	610572	227394	20, 21, 22	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Gemma Hill	05:01	Overcast, rain 0, wind 12, start temp 17 end temp 17	Surveyor 1 Two pipistrelle recorded from the start of the survey, recorded throughout foraging around the line of trees. Very active with frequent passes. One Soprano pipistrelle recorded at 4:00 and 04:30 which were just passes. No roosts detected. Surveyor 2/3 - Constant foraging by low numbers of Common and Soprano Pipistrelles in the tree canopies during the dark period, but had become absent by the time it became lighter. Occasional Noctule overhead.	N		Adult roe deer observed
			19, 20	2 x Batlogger M2 and Canon XA10 IR Camera	09-Aug	Shannon Davies	05:30	Cloud 0, rain 0, wind 4, temp start 14 temp end 12	First call was brief and heard at 04:09 by a bigbat, recording not seen. Common pipistrelle briefly heard but not seen at 04:26. Common pipistrelle foraging up and down treeline from 04:38-04:48. Generally little activity.	N		
1035	610558	227424	21, 22	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Gemma Hill	05:49	Overcast, rain 0, wind 12, start temp 17 end temp 17	Surveyor 1 Two pipistrelle recorded from the start of the survey, recorded throughout foraging around the line of trees. Very active with frequent passes. One Soprano pipistrelle recorded at 4:00 and 04:30 which were just passes. No roosts detected. Surveyor 2/3 - Constant foraging by low numbers of Common and Soprano Pipistrelles in the tree canopies during the dark period, but had become absent	N		Adult roe deer observed

									by the time it became lighter. Occasional Noctule overhead.			
1036	610553	227440	21, 22	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Gemma Hill	05:49	Overcast, rain 0, wind 12, start temp 17 end temp 17	Surveyor 1 Two pipistrelle recorded from the start of the survey, recorded throughout foraging around the line of trees. Very active with frequent passes. One Soprano pipistrelle recorded at 4:00 and 04:30 which were just passes. No roosts detected. Surveyor 2/3 - Constant foraging by low numbers of Common and Soprano Pipistrelles in the tree canopies during the dark period, but had become absent by the time it became lighter. Occasional Noctule overhead.	N		Adult roe deer observed
1045			201, 202	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Hannah McBlain	20:27	Cloud 0, rain 0, wind 10, start temp 24 end temp 19	Surveyor 1 - Potential roost unlikely but popular foraging area. 21:22 single bat observed - no clear point of exit. 21:22 - 21:59 bat busy - noctules and pipistrelles first, joined by serotines at 21:36 21:50-21:57 exclusively serotines/nocts. Several bats appeared to fly between trees, many bats foraging above and next to oak. Load of bats SnH. Surveyor 2 - Busy activity - foragers of different species. Pipistrelles, noctules and serotines heard. No clear emergences.	N		Badger observed within line of trees. Fox cub observed.
			201, 202	2 x Batlogger M2 and Canon XA10 IR Camera	18-Aug	Hannah McBlain	05:44	Patchy cloud, rain 0, wind 5, start temp 17 end temp 17	Surveyor 1 - Lots of non-bat calls on 30+ frequency again. 04:16 - 04:17 pipistrelle (18min canon). 04:24 - noctule HnS. 04:26 - pipistrelle HnS. Surveyor 2 - First call at 04.03. Common pip. foraging behind me for most of survey, last call at 05.14.	N		
1105	609651	227432	23, 24	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Shannon Davies	05:01	Overcast, rain 0, wind 16, start temp 18 end temp 18	First bat recorded at 03:02 one common pipistrelle occasionally foraging along treeline, hxs initially then seen going up and down the treeline until 04:30. One bigbat recorded at 03:04 passing but hxs. One myotis recorded at 04:08, passing, infrequently till 04:25.	N		
1199	608698	228194	31, 32	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Ethan Westmerland	05:33	Cloud 0, rain 0 , wind 7, start temp 16 end temp 15	No roosts. No re-entry or activity surrounding observed trees. 04:09 pipistrelle HnS. 04:18 pipistrelle HnS. No re-entry or activity surrounding observed trees. Surveyor 2 - 03:48 noctule commute over OB31. 04:11 & 04:34 pipistrelle commuter HnS	N		
			31	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Marsha Perera	21:03	Patchy cloud, light showers at beginning of survey, wind 13, start temp 22 end temp 20	Gisele left due to illness (camera remained in position), one surveyor on the trees. First recording: one noctule passing along the treeline at 21:38. Again at 22:05 and 21:19. One common pipistrelle has been foraging within open field and along hedgerow from 22:01 onwards, frequently to occasionally until 22:25. One myotis passing at 21:49. Summary. Moderate levels of activity by atleast three species, mostly along the tree line. No roosts	N		
1200	608690	228282	29, 30	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Kevin McGee	05:00, 21:03	Overcast, light showers, wind	Low numbers of passes by Common Pipistrelle. Occasional Noctule overhead.	N		

								7, start temp 24 end temp 21				
			42	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Harry Sunter	20:29	Cloud 0, rain 0, wind 9, start temp 21 end temp 19	No roosts. No emergences. 21:23 pipistrelle HnS. 21:25 noctule HnS. 21:34 pipistrelle HnS. 21:35 pipistrelle HnS.	N		
			29, 30	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Shannon Davies	05:33	Cloud 0, rain 0, wind 6, start temp 14 end temp 13	First bat recorded at 04:08, of a brief and faint foraging Common pipistrelle. Not seen. Last call 04:34, Common pipistrelle not seen.	N		Little owl passed by at 04:38 traveling south to north along treeline.
1201	608687	228305	29, 30, 42	3 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Kevin McGee	05:00	Overcast, light showers, wind 7, start temp 24 end temp 21		N		Little owl passed by at 04:38 traveling south to north along treeline.
			29, 30	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Shannon Davies	05:33	Cloud 0, rain 0, wind 6, start temp 14 end temp 13	First bat recorded at 04:08, of a brief and faint foraging Common pipistrelle. Not seen. Little owl passed by at 04:38 traveling south to north along treeline. Last call 04:34, Common pipistrelle not seen.	N		
1203	608682	228355	27, 28	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Gemma Hill	21:03	Overcast, Light showers, wind 13, start temp 22 end temp 20	First recording: one noctule passing, north to South along the treeline at 21:37. One leisler/bigbat foraging low around treeline at 21:46 again at 22:06. One common pipistrelle has been foraging within open field and along hedgerow from 21:44 onwards, occasional to frequently until the end. One Soprano pipistrelle occasonally foraging along treeline from 22:06 onwards. Summary. Moderate levels of activity by atleast three species, mostly along the tree line but also within the open field. No roosts.	N		
1205	608682	228343	27, 28	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Gemma Hill	21:03	Overcast, Light showers, wind 13, start temp 22 end temp 20	First recording: one noctule passing, north to South along the treeline at 21:37. One leisler/bigbat foraging low around treeline at 21:46 again at 22:06. One common pipistrelle has been foraging within open field and along hedgerow from 21:44 onwards, occasional to frequently until the end. One Soprano pipistrelle occasonally foraging along treeline from 22:06 onwards. Summary. Moderate levels of activity by atleast three species, mostly along the tree line but also within the open field. No roosts.	N		

1207	608681	228380	25, 26	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Amy Gill	21:03	Overcast, mist at beginning of survey, wind 13, start temp 23 end temp 21	Surveyors switched observation points part way through survey due to another surveyor bring unwell. G.O. moved to obs 26 as a good view of both trees and features. No roost identified. Noctules and pipistrelle species foraging in field behind and along tree line. Batlogger stats Bbar at approx 22:07, but saw a large noc and heterodyne sounded like a noc. Surveyor 2 - Possible myotis heard, noctule heard and seen flying overhead.	N		
			25, 32	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Harry Sunter	05:33	Cloud 0, rain 0, wind 6, start temp 16 end temp 15	No roosts. 04:15 pipistrelle HnS. 04:40 pipistrelle HnS. Surveyor 2 - 4:09, 04:17, 04:33 Common pip heard not seen. 04:53 bat observed commuting down tree line, not heard. overall low level of activity.	N		
1209	608655	228198	31, 32	2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Ethan Westmerland	05:33	Cloud 0, rain 0 , wind 7, start temp 16 end temp 15	No roosts. No re-entry or activity surrounding observed trees. 04:09 pipistrelle HnS. 04:18 pipistrelle HnS. No re-entry or activity surrounding observed trees. Surveyor 2 - 03:48 noctule commute over OB31. 04:11 & 04:34 pipistrelle commuter HnS	N		
			31	Batlogger M2 Canon XA10 IR Camera	20-Jul	Marsha Perera	21:03	Patchy cloud, light showers at beginning of survey, wind 13, start temp 22 end temp 20	Gisele left due to illness (camera remained in position), one surveyor on the trees. First recording: one noctule passing along the treeline at 21:38. Again at 22:05 and 21:19. One common pipistrelle has been foraging within open field and along hedgerow from 22:01 onwards, frequently to occasionally until 22:25. One myotis passing at 21:49. Summary. Moderate levels of activity by atleast three species, mostly along the tree line. No roosts	N		
1210	608604	228206	33, 34	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Amy Gill	05:01	Overcast, rain 0, wind 15, start temp 18 end temp 18	No roost identified. Common pip and soprano pip activity throughout, and a Myotis sp. 04:42	N		Kestrels seen and heard 04:42 - barn owl seen 04:30 - little owl heard. Brown hares seen

1211	608597	228207	33, 34	2 x Batlogger M2 and Canon XA10 IR Camera	21-Jul	Amy Gill	05:01	Overcast, rain 0, wind 15, start temp 18 end temp 18	No roost identified. Common pip and soprano pip activity throughout, and a Myotis sp. 04:42	N		Kestrels seen and heard 04:42 - barn owl seen 04:30 - little owl heard. Brown hares seen
1212	608570	228200	35, 36	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Amy Gill	21:03	Overcast, light rain midway through survey, wind 8, start temp 19 end temp 18	Observation points shifted due to growing crop, still good coverage of the tree. Obs point 36 - TM 08594 28203. Soprano pip foraging around Tree around 03:30 (H+S), a couple of common pip calls also. 03:01 - Myotis sp detected. 03:10 - common pip detected. 03:31 - soprano pip detected	N		Tawny owl and skylarks observed
				2 x Batlogger M2 and Canon XA10 IR Camera	11-Aug	Giselle hynes	20:27	Cloud 0, rain 0, wind 7, start temp 23 end 18	21:11 noctule HNS. 21:34 soprano pip and common pip heard not seen. Continual common pip activity for duration of survey. Surveyor 2 - 21:18 noctule hns, 21:43 & 21:54 common pip hns	N		Barn owl flew out from tree
				2 x Batlogger M2 and Canon XA10 IR Camera	07-Sep	Amy Gill	04:45	Patchy cloud, rain 0, wind 9, start temp 16 end temp 16	1 x Pipip - very low activity- no emergence	N		
1213	608563	228957	84, 87	2 x Batlogger M2 and Canon XA10 IR Camera	02-Aug	Anna Volak	05:19, 20:43	Overcast, rain 0, wind 0.1, start temp 17 end temp 17	No bats heard or observed.	N		
			86, 87	2 x Batlogger M2 and Canon XA10 IR Camera	08-Aug	Shannon Davies	20:33	Cloud 0, rain 0, wind 9, start temp 17 end temp 16	First bat recorded at 22.03 species unknown was heard but not seen. No other observations	N		
			86, 87	2 x Batlogger M2 and Canon XA10 IR Camera	07-Sep	Amy Gill	19:29	Cloud 0, rain 0, wind 9, start temp 19 end temp 14	20:30 - Pippip HNS, 20:37 - quick, brief pass. 36.5, barb? HNS, Air feels damp in second half of survey. Lightning strikes in the distance throughout survey.	N		
1255	608381	228164	37, 38	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Shannon Davies	05:00	Patchy cloud, light showers at beginning of survey, wind 11, start temp 20 end temp 19	First bat recorded order at 03:00 - One Noctule. 03:07-3:44 - 6 passes of Common pipistrelle. 04:07: one Soprano pipistrelle- foraging. Summary: quiet morning, only three species noted foraging Common and soprano pipistrelle and Noctule. No roosts recorded.	N		
			37, 38	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Shannon Davies	05:31	Cloud 0, rain 0, wind 8, start temp 23 end temp 16	Surveyor 1 - First call at 21.20, serotine foraging next to me for a couple of minutes. 221.22 last call, Common pipistrelle Surveyor 2 - First recording was a noctule/bigbat frequently from 21:17-21:21 foraging but was not seen. Brief pass from a single common pipistrelle at 21:25. Brief pass from a soprano common pipistrelle at 21:31. Brief pass from a soprano common	N		1.00 barn owl seen flying into tree.

									pipistrelle at 21:31. C + S Pipistrelles foraging occasionally around but not near tree.			
1284	608286	228155	42, 44	2 x Batlogger M2 and Canon XA10 IR Camera	04-Aug	Amy Gill	05:22	Overcast, rain 0, wind 9, start temp 19 end temp 19	03:22 - noc already heard. Pippyg and pippip heard and seen foraging around T1284. 04:02 - Myotis HNS. Pippyg foraging around tree until 04:56, did not see it entering a roost however it is likely one is nearby as it was still foraging here so close to dawn. Observing view through camera but forgot to hit record until 03:36! Long eared? At 03:44. HNS. No roost identified.	N		
			42, 44	2 x Batlogger M2 and Canon XA10 IR Camera	16-Aug	Hannah McBlain	20:17	Overcast, rain 0, wind 3, start temp 21 end temp 14	No roosts, activity or emergence from tree. Quiet survey. 21:04 - pipistrelle seen commuting over T1284. Pipistrelle bats HnS 21:20 HnS appeared as Nathusius pipistrelle (39khz) with slower repetitions.	N		Mammal cry/screeching - badger? Barn owl HnS.
1291	608267	228283	39, 40	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Kevin McGee	05:00, 21:03	Patchy cloud, light showers at end of survey, wind 8, start temp 21 end temp 20	Low number of passes of Common Pipistrelle and occasional Noctule	N		
			39, 40	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Hannah McBlain	20:29	Cloud 0, rain 0, wind 8, start temp 21 end temp 19	No roosts. T1291 densely vegetated. 20:14 & 20:20 noctules HnS. 21:21 & 21:39 strange owl-like sound 84.4kHz. 21:39 pipistrelle observed foraging by T1292. 21:47 noctule commuter. 10+ bats SnH commuting through gap between trees.	N		
1292	608266	228248	39, 40	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Kevin McGee	05:00, 21:03	Patchy cloud, light showers at end of survey, wind 8, start temp 21 end temp 20	Low number of passes of Common Pipistrelle and occasional Noctule	N		
			39, 40	2 x Batlogger M2 and Canon XA10 IR Camera	10-Aug	Hannah McBlain	20:29	Cloud 0, rain 0, wind 8, start temp 21 end temp 19	No roosts. 20:14 & 20:20 noctules HnS. 21:21 & 21:39 strange owl-like sound 84.4kHz. 21:39 pipistrelle observed foraging by T1292. 21:47 noctule commuter. 10+ bats SnH commuting through gap between trees.	N		
1294	608266	228766	84, 85	2 x Batlogger M2 and Canon XA10 IR Camera	01-Aug	Anna Volak	20:45	Overcast, rain 0, wind 0.1, start temp 19 end temp 18	21:30- Big bat spp., HNS, heard repeatedly, commuting 21:37- c.pip, HNS,	N		Hares observed.
1299	608259	228179	41, 42	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Giselle Hynes	05:00, 21:03	Overcast, light showers, wind 12, start temp 20 end temp 20	No roost. Myotis, common pip HNS. Soprano pipistelles observed foraging above tree canopy.	N		
			42	Batlogger M2 Canon XA10 IR Camera	10-Aug	Giselle Hynes	20:29	Cloud 0, rain 0, wind 8, start temp 23 end temp 18	21:10- 2 bats seen not heard observed commuting along tree line from direction of woodland. 21:16 soprano pip heard not seen. 21:19 noctule foraging along treeline. 21:31 and 21:38 p45 heard not seen. P45 passes for	N		

									remainder of survey. Noctule heard not seen 21:46			
1303	608253	228161	42	Batlogger M2 Canon XA10 IR Camera	10-Aug	Harry Sunter	21:29	Cloud 0, rain 0, wind 9, start temp 21 end temp 19	No roosts. No emergences. 21:23 pipistrelle HnS. 21:25 noctule HnS. 21:34 pipistrelle HnS. 21:35 pipistrelle HnS.	N		
			41, 42	2 x Batlogger M2 and Canon XA10 IR Camera	20-Jul	Giselle Hynes	05:00, 21:03	Overcast, light showers, wind 12, start temp 20 end temp 20	No roost. Myotis, common pip HNS. Soprano pipistelles observed foraging above tree canopy.	N		
1303.1	608244	228148	42	Batlogger M2 Canon XA10 IR Camera	10-Aug	Giselle Hynes	20:29	Cloud 0, rain 0, wind 8, start temp 23 end temp 18	21:10- 2 bats seen not heard observed commuting along tree line from direction of woodland. 21:16 soprano pip heard not seen. 21:19 noctule foraging along treeline. 21:31 and 21:38 p45 heard not seen. P45 passes for remainder of survey. Noctule heard not seen 21:46	N		
1307	608235	228091	48	Batlogger M2 Canon XA10 IR Camera	12-Aug	Harry sunter	05:35	Cloud 0, rain 0, wind 7, start temp 17 end temp 16	3:55-4:21 frequent common pip passes hns. Also myotis pass and Common pip observed foraging between trees. Soprano pip hns 4:46	N		
1307.1	608235	228091	48	Batlogger M2 Canon XA10 IR Camera	12-Aug	Harry sunter	05:35	Cloud 0, rain 0, wind 7, start temp 17 end temp 16	3:55-4:21 frequent common pip passes hns. Also myotis pass and Common pip observed foraging between trees. Soprano pip hns 4:46	N		
1307.3	608238	228109	43	Batlogger M2 Canon XA10 IR Camera	16-Aug	Charlie Kempson	05:41, 20:17	Patchy cloud, rain 0, wind 4, start temp 22 end temp 18	No calls recorded	N		
1307	608244	228110	43	Batlogger M2 Canon XA10 IR Camera	16-Aug	Charlie Kempson	05:41, 20:17	Patchy cloud, rain 0, wind 4, start temp 22 end temp 18	No calls recorded	N		
			48	Batlogger M2 Canon XA10 IR Camera	19-Jul	Shannon Davies	21:04	Patchy cloud, rain 0, wind 0, start temp 24 end temp 24	First bat recorded at: 21:28 potentially roosting in tree 1316. 21:32 - one noctule passing hxs. 21:41 - one soprano pipistrelle foraging along treeline, did not emerge. 22:14- one Common pipistrelle foraging along treeline. Infrequent foraging until end. Summary: generally quiet night, heard common and soprano pipistrelle and noctule.	N		
			47,48	2 x Batlogger M2 and Canon XA10 IR Camera	12-Aug	Harry sunter	05:35	Cloud 0, rain 0, wind 7, start temp 17 end temp 16	3:55-4:21 frequent common pip passes hns. Also myotis pass and Common pip observed foraging between trees. Soprano pip hns 4:46	N		
1316	608225	228079	47, 48	2 x Batlogger M2 and Canon XA10 IR Camera	12-Aug	Harry sunter	05:35	Cloud 0, rain 0, wind 7, start temp 17 end temp 16	3:55-4:21 frequent common pip passes hns. Also myotis pass and Common pip observed foraging between trees. Soprano pip hns 4:46	N		
			47, 48	2 x Batlogger M2 and Canon XA10 IR Camera	16-Aug	Hannah McBlain	05:41	Overcast, rain 0, wind 2, start temp 17 end temp 17	Road access to site purposely blocked - had to detour and missed first 5 minutes. No roosts or emergences. Quiet survey. No bats seen. Only 4 recorded. 03:54 - first - only noctule HnS. 04:03-04:04 & 04:07, 04.51 - pipistrelle HnS. Barn owl heard south-west of T1316.	N		Woodpecker drumming on tree to right. Barn owl heard south-west of T1316.

			48	Batlogger M2 Canon XA10 IR Camera	19-Jul	Shannon Davies	21:04	Patchy cloud, rain 0, wind 0, start temp 24 end temp 24	First bat recorded at: 21:28 potentially roosting in tree. 21:32 - one noctule passing hxs. 21:41 - one soprano pipistrelle foraging along treeline, did not emerge. 22:14- one Common pipistrelle foraging along treeline. Infrequent foraging until end. Summary: generally quiet night, heard common and soprano pipistrelle and noctule. Potential soprano roost from the tree.	Y	Soprano pipistrelle - Potentially roosting in tree although area under foliage to dark to locate exactly. Came from more central area of tree, likely the occluded wood/branch cavities in the centre of the canopy.	
1325	608216	228748	82	Batlogger M2 Canon XA10 IR Camera	01-Aug	Amy Gill	20:45	Overcast, rain 0, wind 13, start temp 18 end temp 19	Noctule heard at 21:30 and 21:45, common and soprano pips heard 21:35 until 22:14.	N		
1330	608205	228077	47	Batlogger M2 Canon XA10 IR Camera	19-Jul	Gemma Hill	21:04	Patchy cloud, rain 0, wind 0, start temp 24 end temp 24	21:30: One Noctule, heard but not seen. 22:17: One Common pipistrelle, heard but not seen. 22:30: One Soprano heard but not seen. No roosts	N		
			47	Batlogger M2 Canon XA10 IR Camera	12-Aug	Giselle Hynes	05:35, 20:25	Cloud 0, rain 0, wind 2, start temp 19 end temp 15	No observations/bats	N		
1331	608204	228746	82, 83	2 x Batlogger M2 and Canon XA10 IR Camera	01-Aug	Amy Gill	20:45	Overcast, rain 0, wind 13, start temp 18 end temp 19	Noctule heard at 21:30 and 21:45, common and soprano pips heard 21:35 until 22:14.	N		
			82, 83	2 x Batlogger M2 and Canon XA10 IR Camera	06-Sep	Gemma Hill	06:15	Patchy cloud,mist, wind 2, start temp 16 end temp 16	Very quiet survey, only one soprano pipistrelle recorded at the start at 04:48.	N		
1331	608207	228748	82, 83	2 x Batlogger M2 and Canon XA10 IR Camera	01-Aug	Amy Gill	20:45	Overcast, rain 0, wind 13, start temp 18 end temp 19	Noctule heard at 21:30 and 21:45, common and soprano pips heard 21:35 until 22:14.	N		
			82, 83	2 x Batlogger M2 and Canon XA10 IR Camera	17-Aug	Hannah McBlain	05:43	Hazy, rain 0, wind 8, start temp 19 end temp 17	4 observation points with 2 human surveyors and 2 camera surveyors. Surveyor 1 No roosts. Logger recorded 100 calls. Foragers between T1331.1 and OB83 when collecting camera. Unable to see these bats on footage. No clear emergences reviewed. OB83 in potato field with rotting produce - foragers attracted to bugs? Surveyor 2 - No roosts. No emergence, no observations. Quiet survey	N		
1332	608201	228056	49, 50	2 x Batlogger M2 and Canon XA10 IR Camera	19-Jul	Kevin McGee	04:59, 21:04	Patchy cloud, rain 0, wind 5, start temp 28 end temp 25	Low numbers of passes by Common Pipistrelle. Occasional Noctule overhead.	N		
			49, 50	2 x Batlogger M2 and Canon XA10 IR Camera	09-Aug	Shannon Davies	20:31	Hazy, rain 0, wind 8, start temp 16 end temp 16	First bat recorded at 21.17. Foraging overhead/behind me sporadically until 21.58. No bats seen near the trees.	N		
1333	608193	228038	51, 52	2 x Batlogger M2 and Canon XA10 IR Camera	09-Aug	Shannon Davies	20:31	Hazy, rain 0, wind 8, start temp 16 end temp 16	First bat recorded at 21.17. Foraging overhead/behind me sporadically until 21.58. No bats seen near the trees.	N		
			52	Batlogger M2 Canon XA10 IR Camera	19-Jul	Giselle Hynes	04:59, 21:04	Patchy cloud, rain towards end of survey,	No roost. Low activity. Brief common pip, soprano pip and noctule passes (bat's heard not seen).	N		

								wind 10, start temp 26 end temp 24				
1337	608186	228028	51, 52	Batlogger M2 Canon XA10 IR Camera	09-Aug	Shannon Davies	20:31	Hazy, rain 0, wind 8, start temp 16 end temp 16	First bat recorded at 21.17. Foraging overhead/behind me sporadically until 21.58. No bats seen near the trees.	N		
			52	Batlogger M2 Canon XA10 IR Camera	19-Jul	Giselle Hynes	04:59, 21:04	Patchy cloud, rain towards end of survey, wind 10, start temp 26 end temp 24	No roost. Low activity. Brief common pip, soprano pip and noctule passes (bat's heard not seen).	N		
1357	608114	229010	92, 93	2 x Batlogger M2 and Canon XA10 IR Camera	03-Aug	Gemma Hill	05:20	Cloud 0, rain 0, wind 10, start temp 16 end temp 18	Common pip pass at start of survey. 04:11 - A single commuting pass of pippyg. HNS.	N		
			92, 93	2 x Batlogger M2 and Canon XA10 IR Camera	17-Aug	Charlie Kempson	05:43, 20:15	Hazy, rain 0, wind 8, start temp 19 end temp 17	No roosts. Quiet survey - no observations.	N		Barn owl seen commuting.
1490	607787	228972	88	Batlogger M2 Canon XA10 IR Camera	02-Aug	Amy Gill	05:19	Patchy cloud, rain 0, wind 8, start temp 18 end temp 18	Only 1 pipistrelle species until 04:30, then a noctule 04:31, HNS.	N		
1496	607778	228952	88	Batlogger M2 Canon XA10 IR Camera	02-Aug	Amy Gill	05:19	Patchy cloud, rain 0, wind 8, start temp 18 end temp 18	Only 1 pipistrelle species until 04:30, then a noctule 04:31, HNS.	N		
			88, 89	2 x Batlogger M2 and Canon XA10 IR Camera	05-Sep	Gemma Hill	19:33	Hazy, rain 0, wind 2, start temp 19 end temp 19	Surveyor 1 - Common pipistrelle detected at 20:32. Then myotis detected at 20:36. Generally quiet on this side of the tree. Surveyor 2 - Noctules recorded from 19:54 through till the end of the survey. Unsure how many as not seen but multiple frequent recordings. Common pipistrelle HNS at 20:20. Soprano pipistrelle first recorded at 20:26 then throughout survey till the end. HNS. Soprano pipistrelle first recorded at 20:26 then throughout survey till the end. HNS.	N		
1499	607767	228934	89	Batlogger M2 Canon XA10 IR Camera	02-Aug	Amy Gill	05:19	Patchy cloud, rain 0, wind 8, start temp 18 end temp 18	Noctule 04:31, HNS.	N		

APPENDIX D

Results synopsis for moderate and high potential trees

Tree Number and location			PRA and Tree Climb Survey Results					Dusk Emergence/ Dawn Re-entry (2022)			Total number of presence/absence surveys	Final Category	Comment
TreeID	X	Y	PRA inspection date	PRA category	PRF inspection date 2022	PRF inspection date 2023	Post-PRF inspection category	Visit 1 Date	Visit 2 Date	Visit 3 Date			
656	611747	227327	14.07.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
657.1	611740	227368	14.07.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
659.1	611729	227441	14.07.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
662	611728	227769	16.06.22	High	N/A	N/A	High	03.08 Dawn	15.08 Dusk	07.09 Dawn	3	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
663.1	611729	227434	14.07.22	High	N/A		High				0	High	Outside RLB, within 100m
669	611718	227864	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
679	611697	227920	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
683	611688	227790	16.06.22	High	N/A		High				0	High	Outside RLB, within 100m
696.1	611651	227836	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
838	611275	227385	16.06.22	Moderate	N/A	29.06.23	Moderate	22.07 Dawn	02.08 Dusk		3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
874	611118	227636	16.06.22	Moderate	N/A	29.06.23	Moderate	22.07 Dawn	03.08 Dusk	06.09 Dusk	4	ROOST	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
909	611009	228178	16.06.22	High	15.07.22	29.06.23	High	21.07 Dusk	04.08 Dawn	17.08 Dawn	5	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
921	610979	228141	16.06.22	High	15.07.22	29.06.23	High	21.07 Dusk	17.08 Dawn		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
926	610961	228232	16.06.22	Moderate	15.07.22	29.06.23	Moderate	21.07 Dusk			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
930.1	610941	227728	16.06.22	Moderate	N/A	29.06.23	Moderate	22.07 Dawn	03.08 Dusk		3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
941	610921	228244	16.06.22	Moderate	15.07.22		High	21.07 Dusk	10.08 Dawn		3	High	
951	610896	228264	16.06.22	High	15.07.22	29.06.23	High	21.07 Dusk	10.08 Dawn		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
951.1	610898	228265	16.06.22	Moderate	15.07.22	29.06.23	High	21.07 Dusk	10.08 Dawn		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1030	610603	227275	16.06.22	High	15.07.22		ROOST	02.08 Dusk		06.09 Dusk	3	ROOST	
1033	610572	227394	16.06.22	High	N/A		Moderate	21.07 Dawn	09.08 Dawn		2	Moderate	
1035	610558	227424	16.06.22	Moderate	15.07.22	27.06.23	Moderate	21.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1036	610553	227440	16.06.22	Moderate	15.07.22	27.06.23	Moderate	21.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1045	610463	228112	10.08.22	Moderate	N/A	29.06.23	Moderate	11.08 Dusk	18.08 Dawn		3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1058	610290	228122	10.08.22	High	N/A		High				0	High	Outside RLB, within 100m
1072	610185	227594	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1090	609832	227196	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1093	609820	227206	16.06.22	High	N/A		High				0	High	Outside RLB, within 100m
1105	609651	227432	16.06.22	Moderate	15.07.22	27.06.23	Moderate	21.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1110	609638	227234	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1151	609327	227801	16.06.22	High	N/A		High				0	High	Outside RLB, within 100m
1158.1	609203	227846	16.06.22	High	N/A		High				0	High	Outside RLB, within 100m
1159	609206	227819	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1161	609198	227806	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m

Tree Number and location			PRA and Tree Climb Survey Results					Dusk Emergence/ Dawn Re-entry (2022)			Total number of presence/absence surveys	Final Category	Comment
TreeID	X	Y	PRA inspection date	PRA category	PRF inspection date 2022	PRF inspection date 2023	Post-PRF inspection category	Visit 1 Date	Visit 2 Date	Visit 3 Date			
1163	609194	227789	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1170	609163	227792	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1177	609140	228115	26.06.23	Moderate	N/A	26.06.23	Moderate				1	Moderate	Outside RLB, within 100m
1178	609139	227822	16.06.22	High	N/A		High				0	High	Outside RLB, within 100m
1179	609128	227811	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1179.1	609128	227811	16.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1190	609047	228387	13.07.22	Moderate	14.07.22		Moderate				1	Moderate	
1191	609044	228393	13.07.22	High	14.07.22		High				1	High	
1192	609043	228413	13.07.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1199	608698	228194	15.06.22	Moderate	12.07.22	27.06.23	High	20.07 Dusk	11.08 Dawn		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1200	608690	228282	15.06.22	High	12.07.22	27.06.23	Moderate	20.07 Dusk			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1201	608687	228305	15.06.22	High	12.07.22	27.06.23	High	20.07 Dusk	11.08 Dawn		4	High	
1203	608682	228355	15.06.22	Moderate	12.07.22	27.06.23	Moderate	20.07 Dusk			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1207	608681	228380	15.06.22	High	12.07.22		High	20.07 Dusk	11.08 Dawn		3	High	
1209	608655	228198	15.06.22	High	12.07.22	27.06.23	Moderate	20.07 Dusk			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1210	608604	228206	15.06.22	High	11.07.22	27.06.23	Moderate	21.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1211	608597	228207	15.06.22	High	11.07.22	27.06.23	Moderate	21.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1212	608570	228200	15.06.22	High	11.07.22	27.06.23	High	20.07 Dawn	11.08 Dusk	07.09 Dawn	5	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1213	608563	228957	15.06.22	Moderate	12.07.22	27.06.23	High	02.08 Dawn	08.08 Dusk	07.09 Dusk	5	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1230	608440	228473	15.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1255	608381	228164	15.06.22	Moderate	11.07.22	27.06.23	High	20.07 Dawn	10.08 Dusk		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1284	608286	228155	15.06.22	Moderate	11.07.22	27.06.23	Moderate	04.08 Dawn	16.08 Dusk		4	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1291	608267	228283	15.06.22	Moderate	11.07.22	N/A	Moderate	20.07 Dawn	10.08 Dusk		3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1292	608266	228248	15.06.22	Moderate	11.07.22	27.06.23	Moderate	20.07 Dawn			3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1294	608266	228766	15.06.22	High	12.07.22		Moderate	01.08 Dusk			2	Moderate	
1299	608259	228179	15.06.22	Moderate	11.07.22	27.06.23	High	20.07 Dawn	10.08 Dusk		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1303	608253	228161	15.06.22	Moderate	11.07.22	26.06.23	Low	20.07 Dawn	10.08 Dusk		4	Low	
1303.1	608244	228148	03.08.22	Moderate	11.07.22	27.06.23	Moderate	08.08 Dusk	16.08 Dusk		4	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1307	608235	228091	03.08.22	Moderate	13.07.22		Moderate	19.07 Dusk	12.08 Dawn		2	Moderate	

Tree Number and location			PRA and Tree Climb Survey Results					Dusk Emergence/ Dawn Re-entry (2022)			Total number of presence/absence surveys	Final Category	Comment
TreeID	X	Y	PRA inspection date	PRA category	PRF inspection date 2022	PRF inspection date 2023	Post-PRF inspection category	Visit 1 Date	Visit 2 Date	Visit 3 Date			
1307.1	608235	228091	03.08.22	Moderate	13.07.22	27.06.23	Moderate	19.07 Dusk	12.08 Dawn		4	Moderate	
1307.3	608238	228109	03.08.22	High	13.07.22		Moderate	19.07 Dusk	12.08 Dawn		2	Moderate	
1307.4	608244	228110	03.08.22	Moderate	13.07.22		High	19.07 Dusk	12.08 Dawn	16.08 Dusk	4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1316	608225	228079	15.06.22	Moderate	11.07.22	26.06.23	Moderate	19.07 Dusk (ROOST)	16.08 Dawn		4	ROOST	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1325	608216	228748	15.06.22	Moderate	12.07.22		Moderate	01.08 Dusk			2	Moderate	
1330	608205	228077	15.06.22	Moderate	11.07.22	26.06.23	ROOST	19.07 Dusk	09.08 Dusk		4	ROOST	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1331	608204	228746	15.06.22	High	12.07.22		High	01.08 Dusk	06.09 Dawn		3	High	
1331.1	608207	228748	15.06.22	High	12.07.22		High	01.08 Dusk	17.08 Dusk		3	High	
1332	608201	228056	15.06.22	Moderate	11.07.22	26.06.23	High	19.07 Dusk	09.08 Dusk		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1333	608193	228038	15.06.22	Moderate	11.07.22	N/A	Moderate	19.07 Dusk	09.08 Dusk		3	Moderate	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1337	608186	228028	15.06.22	Moderate	11.07.22	26.06.23	High	19.07 Dusk	09.08 Dusk		4	High	BCT Guidelines on 14 days survey spacing not adhered to. Not considered to be a limitation.
1357	608114	229010	15.06.22	Moderate	N/A		Moderate	03.08 Dawn	17.08 Dusk		2	Moderate	
1367	608071	227825	15.06.22	High	13.07.22		High				0	High	Outside RLB, within 100m
1373	608051	227839	15.06.22	Moderate	13.07.22		Negligible				0	Negligible	Downgraded on PRF inspection, no further survey needed
1461	607859	229073	15.06.22	High	14.07.22		Negligible				0	Negligible	Downgraded on PRF inspection, no further survey needed
1490	607787	228972	15.06.22	Moderate	14.07.22		Moderate	02.08 Dawn			2	Moderate	
1496	607778	228952	15.06.22	Moderate	14.07.22		Moderate	02.08 Dawn	05.09 Dusk		3	Moderate	
1499	607767	228934	15.06.22	Moderate	14.07.22		Low	02.08 Dawn			1	Low	
1548	607541	228921	13.07.22	Moderate	N/A		Moderate				0	Moderate	Within NG area
1556	607481	229487	13.07.22	High	N/A		High				0	High	Within NG area
1558	607471	228920	13.07.22	High	N/A		High				0	High	Outside RLB, within 100m
1561	607500	229503	15.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1561.1	607502	229495	15.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1561.2	607504	229494	15.06.22	Moderate	N/A		Moderate				0	Moderate	Outside RLB, within 100m
1561.3	607505	229493	15.06.22	High	N/A		High				0	High	Outside RLB, within 100m
1803	610713	227852	28.06.23	Moderate	N/A	28.06.23	Low				1	Low	
1805	610695	227842	28.06.23	Moderate	N/A	28.06.23	Negligible				1	Negligible	
1815	610570	227794	28.06.23	Moderate	N/A	28.06.23	Moderate				1	Moderate	
1823	610459	227736	28.06.23	Moderate	N/A	28.06.23	Moderate				1	Moderate	
1826	610436	227716	28.06.23	Moderate	N/A	28.06.23	Low				1	Low	

APPENDIX E

Transect Survey Results

The following table provides the details, including timings, weather conditions and species encountered for each transect visit in 2022.

Transect ID	Survey No.	Survey Date	Start Time	End Time	Lead Surveyor	Weather at start - air temp °C, cloud cover, precipitation, wind speed	Weather at end - air temp, cloud cover, precipitation, wind speed	Species List	Survey Limitations	Additional Notes
9	1	24/05/2022	20:56	23:56	PH TEC	12, patchy cloud, None, 14	12, patchy cloudy, none, 10	Pipistrellus pipistrellus Pipistrellus pygmaeus Myotis spp.	Leg 7 altered due ditches meaning parts of route were inaccessible	Direction from leg 1 to 9.
9	2	28/06/2022	01:39	04:35	CE TEC	14, hazy, none, 7	11, none, none, 6	Pipistrellus pipistrellus Pipistrellus pygmaeus Barbastella barbastellus Nyctalus noctula	None	Survey direction going from leg 1 to 9
9	3	26/07/2022	20:54	23:54	JS TEC	16, patchy cloudy, none, 9	15, patchy cloudy, none, 8	Pipistrellus pipistrellus Pipistrellus pygmaeus Nyctalus noctula	Due to error, no bat observations were recorded, however, bat activity was recorded.	
9	4	01/09/2022	03:07	06:07	PH TEC	17, hazy, none, 15	17, partly cloudy, none, 15	Pipistrellus pipistrellus Pipistrellus pygmaeus Barbastella barbastellus Pipistrellus nathusii		Direction from leg 1 to 9
9	5	27/09/2022	18:43	21:45	DM TEC	12, hazy, none, 14	10, overcast, none, 9	Pipistrellus pipistrellus Pipistrellus pygmaeus Myotis spp. Plecotus auritus Nyctalus leisleri	N/A	Direction from leg 1 to 9
9	6	25/10/2022	04:38	07:38	WD TEC	11, none, none, 7	11, none, none, 7	Pipistrellus pipistrellus	Parcel with refused access was not included within route.	
10	1	25/05/2022	01:49	04:51	PH TEC	11, patchy cloud, none, 8	11, patchy cloud, none, 9	Pipistrellus pipistrellus Pipistrellus pygmaeus Barbastella barbastellus	Route slightly amended to go around area of thick bramble.	
10	2	28/06/2022	21:18	23:43	CE TEC	17, patchy cloudy, none, 12	15, patchy clouldy, none, 2	Pipistrellus pipistrellus Pipistrellus pygmaeus Pipistrellus nathusii Eptesicus serotinus		Survey direction started at leg 5
10	3	27/07/2022	02:10	05:10	JS TEC	13, patchy cloudy, none, 7	13, patchy cloudy, none, 8	Pipistrellus pipistrellus Plecotus auritus	No bat observations were inputted due to error.	

10	4	01/09/2022	19:42	22:42	PH TEC	20, overcast, none, 15	18, overcast, dry, 9	Pipistrellus pipistrellus Pipistrellus pygmaeus Nyctalus noctula	None	
10	5	28/09/2022	03:51	06:22	DM TEC	7, none, none, 9	6, none, none, 7	Nyctalus leisleri	No bat observations due to none being observed. Weather noted throughout as being too cold.	
10	6	25/10/2022	17:45	20:00	WD TEC	15, none, dry, 9	14, none, dry, 7	Pipistrellus pipistrellus Pipistrellus pygmaeus	Avoided parcel with restricted access	
11	1	24/05/2022	01:51	04:51	PH TEC	11, overcast, none, 9	11, overcast, mist, 12	Pipistrellus pipistrellus Pipistrellus pygmaeus Barbastella barbastellus	Leg 2 was slightly altered due to access issues	Direction start at leg 1
11	2	29/06/2022	21:18	23:45	CE TEC	17, overcast, none, 10	16, overcast, light showers, 9	Pipistrellus pipistrellus Pipistrellus pygmaeus	Leg 1 slightly altered due to being first surveyors to walk it.	Started at leg 4
11	3	26/07/2022	02:09	05:09	JS TEC	15, none, none, 8	15, none, none, 9	Pipistrellus pipistrellus	None	Started at leg 1
11	4	31/08/2022	19:45	22:45	PH TEC	18, none, none, 18	17, none, none, 17	Pipistrellus pipistrellus Pipistrellus pygmaeus Nyctalus noctula Plecotus auritus Pipistrelle spp. Eptesicus serotinus	None	Start leg 4
11	5	29/09/2022	03:53	06:53	DM TEC	7, none, dry, 6	6, overcast, dry, 3	Pipistrellus pipistrellus Pipistrellus pygmaeus	Air temperature was lower than optimal, though some bat activity observed	Start leg 1
11	6	26/10/2022	05:00	07:40		15, none, none, 14	15, none, none, 11	Pipistrellus pipistrellus Pipistrellus pygmaeus	None	Start leg 4

The following table gives details of the surveyor observations for each transect survey visit.

Transect ID	Visit	Time	Location X (Latitude)	Location Y (Longitude)	Behaviour	Species	Maximum number seen
9	1	24/05/2022 21:28	51.91161	1.055444	Commuting	Pipistrellus pipistrellus	1
9	1	24/05/2022 21:32	51.91194	1.056208	Commuting	Pipistrellus pipistrellus	1
9	1	24/05/2022 21:35	51.912	1.057041	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 21:47	51.91195	1.058971	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 21:58	51.91368	1.063671	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:04	51.91404	1.065745	N/A	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:07	51.91313	1.066396	N/A	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:12	51.91172	1.066097	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:17	51.9118	1.06379	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:25	51.90909	1.063431	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:30	51.90819	1.065812	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:33	51.90769	1.067814	N/A	Myotis sp.	1
9	1	24/05/2022 22:37	51.9073	1.068049	Foraging	Pipistrellus pygmaeus	2
9	1	24/05/2022 22:41	51.90613	1.069409	Foraging	Pipistrellus pipistrellus	N/A
9	1	24/05/2022 22:48	51.90407	1.071828	Foraging	Pipistrellus pipistrellus	1
9	1	24/05/2022 22:55	51.9044	1.075136	N/A	Pipistrellus pygmaeus	1
9	1	24/05/2022 23:28	51.9045	1.076161	Foraging	Pipistrellus pipistrellus	N/A
9	1	24/05/2022 23:36	51.90416	1.069231	Foraging	Pipistrellus pipistrellus	1
9	2	28/06/2022 01:30	51.90192	1.064222	Foraging	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 01:40	51.90387	1.06876	Commuting	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 01:44	51.90434	1.070814	Commuting	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 01:45	51.90414	1.071352	Commuting	Barbastella barbastellus	N/A
9	2	28/06/2022 01:57	51.90445	1.075764	Commuting	Nyctalus noctula	N/A
9	2	28/06/2022 02:13	51.90972	1.075383	N/A	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 02:41	51.90723	1.070851	N/A	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 02:43	51.90686	1.071552	N/A	Pipistrellus pipistrellus	N/A
9	2	28/06/2022 02:45	51.90638	1.071956	N/A	Pipistrellus pipistrellus	N/A
9	2	28/06/2022 03:20	51.90754	1.067963	N/A	Pipistrellus pipistrellus	N/A
9	2	28/06/2022 03:22	51.90765	1.067578	N/A	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 03:25	51.90828	1.066211	N/A	Pipistrellus pipistrellus	N/A
9	2	28/06/2022 03:31	51.90909	1.063431	N/A	Pipistrellus pipistrellus	N/A
9	2	28/06/2022 03:38	51.91117	1.063616	N/A	Pipistrellus pygmaeus	N/A
9	2	28/06/2022 03:51	51.91407	1.065399	N/A	Pipistrellus pipistrellus	N/A
9	3	26/07/2022	N/A	N/A	N/A	N/A	N/A
9	4	01/09/2022 03:10	51.90432	1.062466	Foraging	Pipistrellus pygmaeus	N/A
9	4	01/09/2022 03:17	51.90427	1.063277	Foraging	Pipistrellus pipistrellus	N/A

Transect ID	Visit	Time	Location X (Latitude)	Location Y (Longitude)	Behaviour	Species	Maximum number seen
9	4	01/09/2022 03:21	51.90591	1.063912	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 03:25	51.90791	1.065386	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 03:30	51.90864	1.063923	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 03:32	51.90921	1.062842	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 03:37	51.90883	1.059705	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 03:54	51.91178	1.055746	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 04:15	51.914	1.065466	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 04:28	51.9114	1.0635	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 04:46	51.90671	1.068954	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 04:47	51.90637	1.069309	Foraging	Pipistrellus pygmaeus	N/A
9	4	01/09/2022 04:50	51.90529	1.069977	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 04:54	51.90436	1.071004	Commuting	Pipistrellus pygmaeus	N/A
9	4	01/09/2022 04:59	51.90432	1.074432	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 05:01	51.90435	1.075772	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 05:12	51.90715	1.071005	Foraging	Pipistrellus pipistrellus	N/A
9	4	01/09/2022 05:23	51.91285	1.072397	Commuting	Pipistrellus pygmaeus	N/A
9	4	01/09/2022 05:30	51.90983	1.075303	Foraging	Pipistrellus pygmaeus	N/A
9	5	27/09/2022 19:17	51.91316	1.061032	Commuting	Pipistrellus pygmaeus	1
9	5	27/09/2022 19:27	51.91256	1.066604	Commuting	Pipistrellus pipistrellus	1
9	5	27/09/2022 19:48	51.90777	1.067369	Commuting	Pipistrellus pipistrellus	1
9	5	27/09/2022 19:03	51.90395	1.071936	Commuting	Pipistrellus pipistrellus	1
9	5	27/09/2022 19:08	51.90432	1.074723	Commuting	Pipistrellus pipistrellus	N/A
9	6	25/10/2022 05:10	51.90449	1.076029	Commuting	Pipistrellus pipistrellus	N/A
10	1	25/05/2022 01:58	51.90576	1.019233	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:00	51.90611	1.019882	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:12	51.90902	1.025167	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:24	51.91056	1.019832	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:27	51.91093	1.019086	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:35	51.91395	1.020903	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:38	51.91342	1.021463	Foraging	Pipistrellus pygmaeus	N/A
10	1	25/05/2022 02:41	51.91287	1.022997	Foraging	Pipistrellus pygmaeus	1
10	1	25/05/2022 02:48	51.91247	1.026068	Foraging	Pipistrellus pipistrellus	1
10	1	25/05/2022 02:52	51.91318	1.026596	Foraging	Pipistrellus pygmaeus	N/A
10	1	25/05/2022 02:57	51.9123	1.026187	Foraging	Pipistrellus pipistrellus	N/A
10	1	25/05/2022 03:06	51.91272	1.026739	Foraging	Pipistrellus pipistrellus	N/A
10	1	25/05/2022 03:14	51.91328	1.031765	Foraging	Pipistrellus pygmaeus	1
10	1	25/05/2022 03:16	51.91313	1.033122	Foraging	Pipistrellus pipistrellus	N/A

Transect ID	Visit	Time	Location X (Latitude)	Location Y (Longitude)	Behaviour	Species	Maximum number seen
10	1	25/05/2022 03:38	51.90866	1.043654	Commuting	Pipistrellus pipistrellus	1
10	1	25/05/2022 03:42	51.90721	1.045519	Commuting	Pipistrellus pipistrellus	1
10	1	25/05/2022 03:47	51.9047	1.04705	Commuting	Pipistrellus pipistrellus	1
10	2	28/06/2022 21:58	51.90816	1.04455	Commuting	Pipistrellus pipistrellus	1
10	2	28/06/2022 22:00	51.90836	1.04423	Social	Pipistrellus pipistrellus.Pipistrellus pygmaeus	2
10	2	28/06/2022 22:25	51.91319	1.032573	Foraging	Pipistrellus pygmaeus	1
10	2	28/06/2022 22:26	51.91293	1.031291	Commuting	Pipistrellus pygmaeus	N/A
10	2	28/06/2022 22:31	51.91298	1.027629	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 22:34	51.9129	1.026781	Foraging	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 22:37	51.91267	1.026678	Commuting	Pipistrellus pipistrellus	2
10	2	28/06/2022 22:47	51.9123	1.026391	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 22:57	51.91197	1.023955	Commuting	Pipistrellus pygmaeus	N/A
10	2	28/06/2022 23:01	51.91305	1.022122	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:02	51.91323	1.021625	Commuting	Eptesticus serotinus	N/A
10	2	28/06/2022 23:07	51.91233	1.019631	Commuting	Pipistrellus nathusii	N/A
10	2	28/06/2022 23:11	51.91066	1.018806	Foraging	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:14	51.91058	1.019993	Foraging	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:16	51.91061	1.021086	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:21	51.91016	1.023702	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:25	51.90968	1.024426	Commuting	Pipistrellus pipistrellus	N/A
10	2	28/06/2022 23:34	51.90712	1.020473	Commuting	Pipistrellus pygmaeus	N/A
10	2	28/06/2022 23:36	51.90602	1.019876	Foraging	Pipistrellus pipistrellus	N/A
10	3	27/07/2022	N/A	N/A	N/A	N/A	N/A
10	4	01/09/2022 20:13	51.91339	1.021301	Commuting	Pipistrellus pipistrellus	1
10	4	01/09/2022 20:19	51.91193	1.024068	N/A	Pipistrellus pipistrellus	1
10	4	01/09/2022 20:40	51.91302	1.0307	Commuting	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 20:50	51.91041	1.034741	Commuting	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 20:56	51.90959	1.038758	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:00	51.9097	1.040554	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:01	51.90954	1.041329	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:05	51.90891	1.043162	Foraging	Pipistrellus pygmaeus	N/A
10	4	01/09/2022 21:06	51.9089	1.043219	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:09	51.90792	1.044752	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:14	51.90623	1.046252	Foraging	Pipistrellus pipistrellus	N/A
10	4	01/09/2022 21:32	51.9048	1.05296	Commuting	Nyctalus noctula	1
10	4	01/09/2022 21:43	51.90762	1.055639	Foraging	Pipistrellus pipistrellus	N/A
10	5	28/09/2022	N/A	N/A	N/A	N/A	N/A

Transect ID	Visit	Time	Location X (Latitude)	Location Y (Longitude)	Behaviour	Species	Maximum number seen
10	6	25/10/2022 18:20	51.90594	1.033045	Commuting	Pipistrellus pipistrellus	2
10	6	25/10/2022 18:30	51.903	1.027234	Foraging	Pipistrellus pygmaeus	1
10	6	25/10/2022 18:31	51.90353	1.023926	Commuting	Pipistrellus pygmaeus	1
11	1	24/05/2022 02:06	51.92497	1.020189	N/A	Barbastella barbastellus	1
11	1	24/05/2022 02:14	51.92466	1.020502	Foraging	Pipistrellus pipistrellus	1
11	1	24/05/2022 02:18	51.92375	1.021183	Foraging	Pipistrellus pygmaeus	2
11	1	24/05/2022 02:30	51.92161	1.021999	Foraging	Pipistrellus pipistrellus	1
11	1	24/05/2022 02:33	51.92131	1.023463	Foraging	Pipistrellus pygmaeus	2
11	1	24/05/2022 02:45	51.9221	1.025872	Foraging	Pipistrellus pipistrellus	1
11	1	24/05/2022 02:49	51.92239	1.02675	Commuting	Pipistrellus pipistrellus	1
11	1	24/05/2022 03:26	51.91868	1.0273	Commuting	Pipistrellus pipistrellus	1
11	1	24/05/2022 03:29	51.91845	1.026034	Commuting	Pipistrellus pygmaeus	1
11	1	24/05/2022 03:32	51.9183	1.025282	Foraging	Pipistrellus pygmaeus	1
11	2	29/06/2022 21:57	51.92165	1.021551	N/A	Pipistrellus pygmaeus	N/A
11	2	29/06/2022 22:07	51.92235	1.022049	Foraging	Pipistrellus pygmaeus	1
11	2	29/06/2022 22:19	51.92528	1.018551	Commuting	Pipistrellus pipistrellus	N/A
11	2	29/06/2022 22:21	51.92497	1.017483	N/A	Pipistrellus pipistrellus	1
11	2	29/06/2022 22:22	51.92457	1.017107	N/A	Pipistrellus pipistrellus	N/A
11	2	29/06/2022 22:27	51.9199	1.019484	Foraging	Pipistrellus pygmaeus	N/A
11	2	29/06/2022 22:28	51.9247	1.016941	Foraging	Pipistrellus pipistrellus	N/A
11	2	29/06/2022 23:12	51.92116	1.020951	Commuting	Pipistrellus pygmaeus	N/A
11	2	29/06/2022 23:17	51.91876	1.018869	Commuting	Pipistrellus pygmaeus	N/A
11	3	26/07/2022 02:59	51.92121	1.021056	Foraging	Pipistrellus pipistrellus	1
11	3	26/07/2022 03:06	51.92408	1.021045	Commuting	Pipistrellus pipistrellus	1
11	4	31/08/2022 20:18	51.92164	1.021594	Foraging	Pipistrellus pipistrellus	2
11	4	31/08/2022 20:32	51.92478	1.020278	Foraging	Pipistrellus pygmaeus	1
11	4	31/08/2022 20:35	51.92506	1.021111	Foraging	Pipistrellus pipistrellus	1
11	4	31/08/2022 20:46	51.92468	1.016882	Foraging	Pipistrellus pipistrellus	2
11	4	31/08/2022 20:54	51.92515	1.015066	Foraging	Pipistrellus pipistrellus	1
11	4	31/08/2022 21:13	51.92292	1.017069	Commuting	Pipistrellus pipistrellus	N/A
11	4	31/08/2022 21:22	51.92012	1.017478	Foraging	Pipistrellus pipistrellus	N/A
11	4	31/08/2022 21:25	51.92017	1.015692	Foraging	Pipistrellus pipistrellus	N/A
11	4	31/08/2022 21:27	51.92018	1.01514	N/A	Nyctalus noctula	N/A
11	4	31/08/2022 21:36	51.91864	1.014877	Commuting	Pipistrellus pipistrellus	1
11	4	31/08/2022 21:54	51.92123	1.021043	Commuting	Pipistrellus pipistrellus	N/A
11	5	29/09/2022 04:03	51.91756	1.019153	Commuting	Pipistrellus pipistrellus	1
11	5	29/09/2022 04:05	51.91794	1.018786	Foraging	Pipistrellus pygmaeus	1

Transect ID	Visit	Time	Location X (Latitude)	Location Y (Longitude)	Behaviour	Species	Maximum number seen
11	5	29/09/2022 05:09	51.92102	1.024447	Commuting	Pipistrellus pipistrellus	1
11	6	26/10/2022 06:15	51.91883	1.013653	Commuting	Pipistrellus pipistrellus	1
11	6	26/10/2022 06:19	51.91843	1.015938	Foraging	Pipistrellus pygmaeus	1
11	6	26/10/2022 06:26	51.91953	1.019387	Foraging	Pipistrellus pygmaeus	1

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